Reader's Digest

ARTICLES OF LASTING INTEREST

EIGHTH YEAR OF PUBLICATION

NOVEMBER, 1928

25c a Copy

When and Where the Digest Is Read

CONTINUED FROM THE OCTOBER ISSUE

BECAUSE of the truly amazing response from the announcement in the September number, asking for novel times and places in which the Digest is regularly read, it was decided to increase considerably the number of two-year subscription awards and, in addition, to grant fifty one-year consolation prizes. Even this has not greatly lessened the difficulty of selecting prize-winners, for almost every unique spare-time use has been mentioned more than once.

For example, who would have thought of reading the Digest while milking cows! Yet no less than five dairymen swear that this is their practice! And such ingenuity! "I have a strap around the cow's back to which I riveted a mouse-trap. The mouse-trap holds The Reader's Digest in place for me." Another uses "a weighted line over the cow, with two clothespins holding open the copy."

No tabulation has yet been made, but a fair guess is that two-score women attest to the advantages of reading the Digest while nursing their babies. "Nursing need not be a dull time for any mother," writes one.

An actor in New York says: "The Digest is propped against my mirror while I make up . . . when I finish a copy it goes the rounds of the dressing rooms." While from Hollywood comes this letter: "It would surprise you to know how many well-known stars, directors, actors and actresses are constant readers of the Digest, and make daily use of it at the studios, when a lull in production occurs."

Salesmen and saleswomen — numbers of them — carry the Digest in their pockets to read, as one of them puts it, "in the innumerable ten or fifteen minute waits a salesman is subject to at the hands of busy executives and purchasing agents."

An engineer on a freighter running to Alaska, "reads it from cover to cover, keeping it next the engine log book."

(*Continued Inside Back Cover*)

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The Drive Behind Clemenceau

Condensed from The Living Age (September 1, '29)

Juan José de Soiza Reilly

An Argentine Journalist

I WAS praising Clemenceau, the "Tiger," for his combativeness. "How do you manage to keep yourself in such a bad humor in political life?" I asked him. He was pleased with the question.

"Candidly," he said, "it is remembering what my father suffered. When I am in a dispute, whenever I feel my faith in Republican ideas and democratic principles weakening, I think of him. That memory is enough, I am immediately changed. I become he.

"My father, Benjamin Clemenceau, was a doctor, as I was much later. One day, he became so deeply affected by all the human suffering he saw that sadness overcame him. He shut up his office and went off to Nantes with my mother and all their children. He planned to dedicate himself to farming, and to the cultivation of Republican ideas. You can imagine the situation of a Republican in the imperialistic France of 1854, under that little Napoleon III who had just dissolved the Assembly, crowned himself Emperor, and was deporting to Argelia all those who did not agree with his ideas, which meant all those who refused to grovel at his feet.

"In Plançon's bookshop in Nantes a little group of intellectuals used to meet and talk together. Among them was my father. One night the police came and arrested him simply because, in private conversation, he had maintained that a Republican democracy was the only hope for

France. They decided to deport him to Africa. The day that they took him away to Marseille, standing between two murderers in the prison van, I went with my mother to say good-bye to him. I was 13 or 14. I saw my mother crying. I saw father, behind the bars of the van, chained and handcuffed, condemned without trial. None of his intimate friends was there. They had all been afraid to come to say good-bye and had hidden instead. Cowards! From that moment, I knew the difference between true friendship and false. From that day forward I began to growl, and I kept on growling. When the van was about to leave, I came up close to the bars. I said to my father: 'I will avenge you!'

"My father, who was a painter and poet, as well as a great man, was deeply affected, and kissed the hands that I stretched out to him through the bars. Then he said sternly: 'If you want to avenge me, study hard, and work!'

"I studied. I worked to avenge him. I am 88 years old. I hope to have 12 years more in which to defend my father's faith!"

Similar Anecdotes Solicited

¶ THE READER'S DIGEST will pay $15 each for the five best anecdotes from the lives of famous men or women, illustrating the turning point in their careers, — the dominant factor which shaped their destinies. ¶ "The Drive Behind Clemenceau" is the type of material desired. Contributions must be short and to the point, and if a direct quotation is made, the source must be given. ¶ Mail to the *Contest Editor*, READER'S DIGEST, before December 1st.

FOR THE BLIND

THE READER'S DIGEST is the only ink-print periodical issued in its entirety in Braille. Each Braille copy is a clothbound book, approximately 11 inches square in size, and 2 inches thick. It is sold at actual cost of production, $2.00 for a single copy or $20 a year, by the American Printing House for the Blind, Louisville, Kentucky.

Insects and Men

Condensed from The Atlantic Monthly (October, '29)

James E. Boyle
Professor of Rural Economy at Cornell University

THE world's history needs to be rewritten in terms of insects. Who will tell what the yellow fever mosquito, for instance, or the cattle tick, or the tsetse fly has done to the human race?

There are estimated to be over 400 million kinds of insects in the world, and all of them are of significance to mankind. These insects are all our competitors for the world's limited food supply. Who shall inherit this earth, man or bug, will depend in the last analysis on which creature is most efficient in securing his daily ration.

When we remember the bug's capacity to reproduce, we begin to feel uncertain about our own future survival. Consider, for instance, the tiny green cabbage aphid. Under favorable conditions, there are 30 generations of these bugs in one year. The mother aphid who lays her eggs the first of April becomes the progenitor of 12 generations by the middle of August. She produces 41 young in one generation. Therefore, by the middle of August, if all the mother-aphid descendants should live, there would be alive at one time some 560 quadrillion aphids! Or to state it more exactly, 564,087,257,509,154,652 aphids. And they would weigh about eight times as much as all the human inhabitants of this globe.

This shows rather strikingly what one mother aphid can do in four and one-half months, if she has plenty of food and no enemies. We must also remember the size of the insect's appetite — especially when in the larva stage. Familiar examples of the larva are the maggots — children of the common house fly — and the caterpillars, grub worms, and so on, children of the butterflies and moths which play like fairies in the sunlight or moonlight. The sole business of the larva is to eat and grow. And so we find that the caterpillar of the common Polyphemus moth consumes, in about 56 days, 86,000 times his original weight. This is rather terrifying!

Still, the balance has been maintained, thus far, between man and bug, so that the bug has not yet deprived his human competitors of too much of their food supply except in the cases of insect plagues.

Will man or bug inherit the

earth? If it is a question of the survival of the fittest, then the argument favors the bug. The cockroach, for instance, was here a million years before man came; therefore he will likely be here a million years after man has joined the dodo. The cockroach came with the coal age. He is versatile. Living first in Asia, he traveled by ship to Holland, and later became at home all over Europe. While he prefers the warm climate, he is found in numbers among the Laplanders in the far north. He often destroys quantities of the dried fish they put away for winter. More famous, however, are the cockroaches of Brazil. Here a traveler reports seeing children with their eyelashes more or less eaten off by cockroaches. The eyelashes were bitten off irregularly, and in some places quite close to the eyelid. Since Brazilian children naturally have the beautiful drooping lashes of the Latin races, their appearance was strangely defaced. These same cockroaches also bite off bits of toenails. Apparently they confine their depredations to children.

As the cockroach has migrated all over the world, so, too, many other insects are doing. Man's scientific means of insect control is offset by the modern means of travel which the insect now uses. When Lindbergh finished his 46,000-mile flight, touching three continents and dozens of countries, think of the scores of new insects he picked up and brought back to the United States! And one female insect — even an egg — is enough to start a new pest.

Whence come our present insect pests? Most of them come from foreign countries. Thus they leave behind their natural enemies, and, with plenty of rich food, they show us what the mathematical formula of geometric progression looks like when put into practice.

In the 70's an insect from Australia, the cottony scale, threatened the speedy and absolute extinction of the citrus industry in California. The counter attack launched by our Department of Agriculture was one of the most spectacularly successful jobs ever done in the field of entomology. But the battle was not the work of a year. The insect had to be traced to Australia. Then a seasoned bug hunter was sent to Australia to spy out these insects and to collect specimens of its enemies. This entomologist, Mr. Albert Koebele, found a little ladybug with a voracious appetite for this one insect. He succeeded in bringing specimens alive on the long voyage across the equator — a very difficult feat. When these ladybugs were tried out on an infested orange tree the result was

a glorious triumph for the scientist. The Australian ladybugs fell on the cotton scales with such avidity that the problem was solved. No other insect tried in international work has been such a success.

Next to this achievement stands our success in saving the Hawaiian sugar crop from annihilation at the hands of the Australian cane-leaf hopper. Again the natural enemy of the hopper was found and successfully brought to the scene.

These two brilliant successes in overcoming our insect enemies had one undesirable effect; they created a sense of false security in the minds of the general public. The feeling became general that our proficient entomologists could always solve the problem. The fact remains that in only a few conspicuous cases have we won the battle against the bug. We have already surrendered to the chestnut blight and these noble and useful trees are fast becoming extinct. Congress last year spent ten million dollars in the corn-borer campaign, and the total effect was to mitigate very slightly the ravages of this pest. The corn borer will undoubtedly continue his march until the whole corn belt is covered, and we shall pay him perpetual tribute in the form of a few hundred million bushels of corn a year. This pest has never been stopped yet in any country.

We have already learned to live with the Hessian fly, who came over with mercenary troops during the Revolution. We have already paid him tribute of hundreds of millions of bushels of wheat, and shall keep on doing so.

The Mediterranean fruit fly was discovered in Florida early in 1929. It traveled rapidly west and now definitely threatens the citrus industry of California.

The cotton boll weevil arrived in Texas in 1892 from Mexico. This insect has now definitely established himself in every cotton state except California. He is with us as a permanent boarder. The fight will continue against him, as against the corn borer, not to exterminate him, but to keep him within bounds.

We multiply our scientific means of overcoming harmful insects. But as fast as one bug is destroyed two new ones take his place. Our worst pests today were unknown to our grandfathers, and our grandchildren may struggle with new and more harmful insects than we know. Even at the present moment entomologists estimate that they are acquainted with one kind of insect out of eight to ten. How the battle between insects and men will swing in the future it is impossible to prophesy.

"Nothing Just Happens"

Condensed from The New York Herald Tribune (September 29, '29)

Mark Sullivan

Political Writer; Author of "Our Times" etc.

ONE definition of propaganda is getting the government to do what private interests want — or, as in the recent Shearer case, preventing a government from doing what private interests don't want. That is a limited definition. Much propaganda is devoted to causing people generally to think what private interests want them to think.

Frank Kent of *The Baltimore Sun* some years ago printed a list of the lobbyists and lobbying organizations in Washington. The list made a column and a half. But it included only those who had their names and their business on their office doors — in other words, the most innocuous fraction of the total number of propagandists. The greater number of propagandists describe their business as something different from what it is. Shearer, for instance, did not announce himself as "preventer of international agreement." It was only because he was dissatisfied with what he was paid, and sued for more, that the public got a peep at the business.

Propagandists influence more public events than is ever imagined by the public. Scores of cases of such influence have been revealed in recent months and years.

A public utility magnate in Chicago contributed more than $200,000 to help the election of a United States Senator. If this candidate had won his seat, would he have been a Senator for the public or a lobbyist for the utilities?

In Pennsylvania is a tax law which may fairly be described as favoring manufacturing as against farming. A Pennsylvania manufacturer contributed more than $200,000 to defeat a candidate for Governor who would try to change the law. This same manufacturer is now described as the principal lobbyist in behalf of manufacturing interests in the pending tariff bill.

If we would make the definition broad enough, propaganda and lobbying are among Washington's principal industries. Frequently the function of lobbyist overlaps on that of lawyer. Often a lawyer is employed because of his familiarity with government departments, or because of his personal relations with government officials. Some of the most

successful lawyers in Washington are men who have at one time been members of Congress or officeholders, and whose particular advantage over other lawyers lies in their acquaintance with the personnel of government departments.

No newspaper man in Washington can be a lobbyist and remain a newspaper man. Before any correspondent is admitted to the press gallery of either the Senate or House, he must sign an official pledge stating that he is not employed directly or indirectly in any lobby. Infractions of that pledge are interpreted with extreme strictness. Some newspaper men give up their newspaper connections and become publicity men of one sort or another, since a publicity man or propagandist is often paid many times what the average newspaper man gets.

The word "happen" ought never to be used to describe the course of public affairs. When a historian uses the phrase "it happened that," the truth is he does not know what did happen. That is, he may know the outcome but he does not know the mechanism that brought it about.

It was Mr. Will Hays who said: "Things don't happen; they are brought about." Mr. Hays was and is, himself, one of the most effective "bringers about" in the contemporary world. To a considerable degree he brought about the big majority Harding got in the Presidential race in 1920. Then in 1921 there was widespread demand from churches and newspapers for censorship of motion pictures. The motion picture people employed Mr. Hays, then Postmaster General, to be the "movie czar." Presently there was less demand for motion picture censorship.

This demand for censorship did not spring up spontaneously as the "will of the people." There is no such thing as a "will of the people" in the sense of a spontaneous force intelligently directed.

What happened, undoubtedly, was that many persons were shocked by the early motion pictures. Some of those persons devoted themselves to bringing about censorship. Those persons, by that act, were "bringers about." The fact that a man's purpose is not personal profit does not alter the fact that he is propagandist or lobbyist if he is engaged in bringing about statutory action by Congress or Legislature. A considerable portion of the lobbyists and propagandists in Washington are engaged in purposes commonly admitted to be laudable, for motives that are unselfish.

Let us turn to one of the most familiar of present-day phenom-

ena and consider how it was "brought about." In 1909 there were practically no paved roads. Today there are tens of thousands of miles. Now how was this "brought about?"

In the course of preparing a history of "Our Times," I gathered material on this subject. Among that material I have a letter from a man who in 1901 was elected president of a road-making machinery company. In 1909 a combination of road-making machinery companies was formed with this man at the head. "Having the direct responsibility of the pushing forward of these companies," he says in part, "I began to do some real thinking. I realized that whatever roads were built in the United States were to be paid for by the people. The problem, therefore, seemed to be a simple one of getting the people of the United States interested in road building." And that he proceeded to do.

The good roads that have spread throughout the United States are commonly considered to be a laudable innovation. But it was private interest, profit-making interest — the interest of manufacturers of roadmaking machinery that started the movement — joined later by cement manufacturers and automobile manufacturers and others. And their method of operation was largely propaganda and lobbying.

Just a few weeks ago there was started in a Southern state a movement for a bond issue to build improved roads. Surely the people of that state must have known that movement did not just "happen." In any event, presently there was formed a "Joint Committee for Highway Bonds." Presently there was a "campaign manager." Presently the campaign manager wrote a letter, destined to be embarrassing, in which he set forth the need for money for what "is to be known as the legislative fund . . . the funds to come from material men, contractors, bonding and insurance companies and machinery people. This fund is to cover legislative expenses in getting three or four men directly inside of the organization to keep contact with individual legislators and to report to the general steering committee. . . ."

History rarely tells how things come about. Things commonly come about because some person or persons want them to be brought about and are willing to pay to have them brought about. Yet rarely do the books of history or the newspapers find out the name of the man who wanted something brought about, how much money he put up, and whom he hired.

How Long Will You *Live?*

Condensed from The Review of Reviews (August, '29)

Eugene Lyman Fisk, M.D.
Medical Director, Life Extension Institute

BELIEF that the natural lifetime of man is three-score years and ten is a myth. It is entertained not only by the superstitious, but is strongly fixed in the minds of some medical men. The dean of an important medical school wrote me not long ago: "I think the pathological evidence is quite convincing that the tissues of the body wear out after a certain length of time, and that there is a fairly definite fixed limit to human life."

If the worthy dean is right, then the many causes back of the life cycle are fixed, unalterable, and beyond the reach of science.

Suppose the Canal Zone in its former state had been restricted and cut off from the rest of the world without knowledge of living conditions or death rates beyond its borders. There would then have been just as much warrant for scientists to claim that the appalling death rate of that region and the limited life cycle were conditions more or less fixed by nature, and that control of such a situation was beyond scientific power, as there is at present to claim that conditions affecting the life cycle are fixed and beyond scientific control.

The difference is in degree and not in kind. It is only our ignorance of the causation of the more insidious mechanisms that originate disease that prevents such spectacular results as were attained in the Canal Zone in cutting the death rate and extending the life span.

A so-called natural life cycle is not only a fluctuating one but is susceptible of control by scientific measures. To those who claim otherwise — and there are many — I ask, "Which life cycle is fixed? Which one do you select as the fixed life cycle, that of India, New Zealand, the United States, or the former life cycle in the Canal Zone?" What occupation reflects a fixed and normal life cycle, that of the astronomer showing a death rate of 15 to 20 percent below the average, or the lawyer showing a death rate of 5 to 15 percent below the average, or the physician with a death rate well above the average, or the window cleaner with a death rate of 40 to 60 percent above the average? These are instances of the wide variation in the death rates in various occupations,

according to the estimates of life insurance companies.

Abundant evidence is available, moreover, to demonstrate the fact that the life cycles of living organisms, including man, have been profoundly altered through artificial means, as well as the fact that life cycles for certain organisms range far beyond anything yet shown for man.

Why should a turtle live 200 years and a man only 70? Why should the inner cells in the redwood tree live 400 years, as demonstrated by MacDougal, and the cells in man's body last less than 100 years? Some will answer, this is the price man pays for his highly differentiated organism, for his civilized existence. A redwood tree can only stand in one spot and look beautiful. Are there not men and women who do little else and get paid for it?

In laboratory testimony we find some significant facts. Legs have been made to sprout prematurely in the tadpole by altering the supply of oxygen in the surrounding medium. This is knocking the tadpole wholly out of his biologic stride. So, too, the life of the fruit fly has been prolonged 900 times the normal by protecting it from poison and infection, and lowering the temperature of its environment. In Carrel's experiment, the cells from the heart of a chicken embryo have been kept alive for the past 17 years by protecting them from certain influences in the environment.

Considering for a moment the influences affecting life phases of the human organism, we find that the cretin, a helpless biologic product of faulty thyroid structure, may be normalized by the administration of thyroid extract. A man dying of pernicious anemia, which in principle is not very different from dying of old age, is rescued by liver extract. A diabetic patient is normalized by extract of the pancreas.

Even the germ plasm supposed to be inviolate has been opened to scientific influence, and in such higher animals as the frog and the bird reversibility of sex has been attained in the laboratory. Truly, next to whether an individual shall be a dog or a man, the most important question of heredity is whether the human individual shall be a man or a woman. No reversibility has yet been attained in so high an organism as man, but the principle having once been demonstrated for living organisms, we may assume that it is simply lack of knowledge that prevents a similar accomplishment in man.

Now as to the present human life cycle, the expectation of life at birth, the real average lifetime, is only 58 years. A man reaching age 50, say, actually has

a life expectancy of about 21 years.

It is true that in this country most of the life saving effected in the past 30 years has been among people under 30 years of age and particularly under five years of age. The expectation of life at 50 — 21 years — has not materially altered in the past 100 years. But in England and the Scandinavian countries there has been a reduction in the death rate at practically every age period of life. This nullifies the thesis advanced by some that inasmuch as no extension has been effected in this country at these later age periods, none can be.

Dr. Louis I. Dublin, the life-insurance statistician, has shown that if the favorable death rate now prevailing among certain classes and in certain communities could be generally maintained, human life could be extended about ten years beyond the present average lifetime. Excellent proof is found in the records of a group of policyholders taking the periodic health examination offered by a certain large life insurance company. On the whole group, a reduction of 18 percent in the mortality rate among those examined was found over a period of ten years. Among those between 50 and 60 years of age there was a reduction of 53 percent in the mortality rate as compared to policyholders of the same class who were not periodically examined and counseled as to their health needs.

It is disease, not old age, that causes death. And the lives of such men as Oliver Wendell Holmes (88 years old), Robert Dollar (85), Thomas A. Edison (82), Elihu Root (84), George F. Baker (89) and John D. Rockefeller (90) prove that man's lifetime is not fixed at threescore years and ten.

"That they may have life and have it more abundantly" is a message as much needed today as it was in the days of Christ. For it is disease — mental or physical — that causes unhappiness. The philosopher, Schopenhauer, gave us a key to the situation:

> With health, everything is a source of pleasure; without it, nothing else, whatever it may be, is enjoyable. It follows that the greatest of follies is to sacrifice health for any other kind of happiness, whatever it may be, for gain, advancement, learning, or fame, let alone, then, for fleeting sensual pleasures.

My Museum Complex

Condensed from The World's Work (October, '29)

Roy Chapman Andrews
Scientist and Explorer

ON returning to the American Museum of Natural History after two years of wandering in the Far East, the first man I met was Carl Akeley, of African fame. We hugged each other, for there were few men who inspired such deep affection among his friends as "old Ake."

"I'm just leaving for British East," he said. "The African Hall is a going concern. It has been a long fight financially, but at last it is over the top. Come up to my room."

I went. An elephant bulked hugely almost to the ceiling. Two life-size models of Masai warriors poised with spear and shield against a pair of charging lions. A white rhinoceros stood in majestic repose beside the window. An elephant gun lay upon the desk.

In spite of his enthusiasm Akeley looked like a broken man, physically. Long ago in Africa he had been attacked by a wounded leopard. His rifle had jammed after a shot that had broken the leopard's foot, and before he could get away, the beast was on his back. They rolled in the sand together, Akeley on top. With his knees pressing into the beast and breaking ribs, he strangled the leopard with his bare hands. Akeley was a mass of dripping blood and mangled flesh when he staggered into camp.

Years later a bull elephant had crushed his chest. He never forgot that night of agony in the African jungle as, helpless, he listened to the roars of lions and the yelps of hyenas, expecting every moment they would catch his man-scent on the wind. Later he lay almost dead of the terrible blackwater fever. But he would not go home till his job was done.

Soon after I talked with him he left on his last Great Exploration from which he never returned.

Once he said to me, "Roy, sometime I'm going to Africa on my own. I'll build my little camp fire and sit there and smoke and do nothing and be happy because I won't have to make good to anybody."

"Yes," said I, "you will *not*. When you kill an elephant why do you slave in the heat and flies and fever to save its skin? Because people gave dollars to send you to the jungle? Rot! You have a museum complex. We all have or we wouldn't be here. It's the only way we can be happy."

Akeley, I think, typified the spirit of the modern museum.

In 1927 ten million school children were reached by the Museum activities; nearly two and a half million people actually visited the Museum. Every day autos leave the Museum carrying "loan collections" of birds, mammals, minerals, and so on, to various schools of the city. Classes make periodical excursions to the Museum to see exhibits which illustrate some particular course of study. Hundreds of thousands of lantern slides and motion-picture films are loaned to schools, and teachers can arrange illustrated lectures on almost any subject of natural science. There are collections and study rooms especially arranged for the blind.

The public reads of the return of expeditions with so many thousand animals and birds or so many cases of fossil bones. But few people know the romance and excitement bound up in these vast collections.

Consider the story of the dinosaur eggs. We were working in a great deposit of dinosaur bones at the Flaming Cliffs in the center of the Gobi Desert. One day one of our collectors remarked that he had found some strange fossil eggs. We thought his "eggs" would prove to be sandstone concretions. But when we went to look at them we very soon realized that we were looking at the very first dinosaur eggs that had ever been seen by human eyes. Three had broken out of a sandstone ledge; it was probable that the ledge contained more eggs.

We had neither the time nor the instruments to obtain them, if indeed they were there. Finally we decided to send a large section of the ledge to the Museum. It is a difficult job to transport a rock weighing hundreds of pounds from the Gobi Desert to New York, and it would have been an expensive joke if there had been nothing in it. But it reached the Museum safely.

Then began the interesting job of unwrapping a package ninety-five million years old! Working with tiny chisels and scrapers, the preparators struck bone almost immediately. To our amazement, they exposed the skeleton of a small dinosaur lying just beneath the surface. It was only four feet long and toothless, a new type to science. Professor Osborn is convinced that it fed upon the eggs of other dinosaurs. Probably it was digging into this nest when it was smothered by the violent sandstorm that buried the eggs. When this skeleton had been removed two-thirds of the block was still untouched. Would there be anything else in it? Bit by bit the preparators worked away the stone. In the very center of the slab were 13 almost perfect eggs, lying in a double circle. It re-

quired weeks to pick the rock away and expose the eggs.

Mounting of large animals for a group is no longer a simple matter. Akeley did more than any other man to advance taxidermy to a high art. A modern taxidermist can never be more than passable unless he is a skillful sculptor. That was one of Akeley's greatest gifts. His bronzes of elephants, lions, gorillas, and human figures are given first rank among world sculptors. He used to work for months on a single specimen. When the animal was done it all but breathed.

One of his early problems was how to obtain a light body for such a huge mounting as an elephant. He conceived the idea of placing the skin over a framework and coating the inside with soft cement which could be modeled before it dried. He needed a spray to apply the cement, and as none was available, he invented one. Later the commercial importance of his cement gun was demonstrated when it was used in construction work at the Panama Canal, and in making cement ships during the war. Another of his inventions is the Akeley camera, an instrument indispensable to nature photographers.

His whole life was an example of the modern museum ideal, objective education. He had a passion for perfection. Always was he struggling to find new and better ways to bring a selected section of some far country to the people of America. The animals he shot had to be perfect specimens or he never pulled a trigger. The notes and photographs he made, the drawings of difficult anatomical parts, the plaster casts and models were all in an effort for perfect reproduction. Every flower and bush and leaf, even the dirt itself, must come from the very spot he had selected to reproduce in an exhibit.

Many of the exhibits are world famous. When Clemenceau visited America, after the war, he insisted on coming immediately to see the giant carnivorous dinosaur, Tyrannosaurus. Few visitors to New York miss the dinosaur eggs. The evolution of the horse, from the tiny four-toed Eocene type, no larger than a small dog, up to the thoroughbred of today, is known everywhere. Dozens of other exhibits are equally famous.

The making of a good museum man must be in the blood. The life is not all pleasure and excitement. Dozens of boys try their hands at the game, but few last very long. The work becomes mere drudgery, if one's heart is not in it. In this work one must also relinquish hope of gaining worldly goods. Still, a museum life brings a kind of happiness that money can never buy.

Rustle of Silk

Condensed from The Mentor (September, '29)

Blanche Bonaparte
(Mrs. Jerome Napoleon Bonaparte)

MARCO POLO gives us a dazzling picture of the use of silk at the court of the Grand Khan of Mongolia. On his birthday "the Grand Khan dressed in the best of his robes, silk and wrought all over with beaten gold. Full twelve thousand barons and knights on that day came forth dressed in robes also of silk and gold. Thirteen times a year the Great Khan presents to these twelve thousand courtiers a different colored suit of raiment, the one bestowed on his birthday costing about ten thousand gold besants."

A sheen of silk also glosses the turbulent tale of Alexander, conqueror of half his world. When disdainful Statira, daughter of Darius the Persian, scorned his love though she was his captive, he passionately hoped to make himself more desirable in her eyes by putting off the battle-stained clothing of a warrior and assuming silken raiment. He surrendered himself to Bagoas the eunuch, who bathed, oiled and scented his magnificent limbs and then clothed him in lustrous silk. Silk on Alexander! Luxurious trappings on a war-torn conqueror! Statira laughed when he appeared before her, and the smooth garments became as gunny-sack against his flesh.

Aristotle the philosopher submitted to a gross indignity for love of a girl in a silken skirt. In Alexander's boyhood Aristotle came from Athens to be his preceptor, and once he put an end to certain goings-on between the boy Alexander and a maid-in-waiting named Philis. This was Philis's revenge. One morning she put on the filmiest dress she had and went to a place where Aristotle could see her as she stooped to pluck flowers. The philosopher fell completely a prey to the bare-legged girl in a wisp of silk and frantically agreed to do anything she asked in return for her favor. He even submitted to being saddled and ridden around the garden with silken strands for reins, while her airy draperies flowed over him. When the poor man was panting for breath she hopped off his back, gave him a slap, and told him to go to the devil. It was after this that he wrote of the cunning of women, "There is no remedy except that of keeping away from them."

When first introduced into Rome from the Orient, silk was

worth its weight in gold. Goethe relates in his disquisition on Roman luxury that, being precious, it was woven as fine as possible, and garments made of it were transparent. Only lights-o'-love wore the frail tissue.

Silk was first brought to France and adjoining countries by the Crusaders. The wealthy eagerly adopted the sumptuous new material. When Philip the Fair brought his bride home, she saw much silk being worn and cried pettishly, "I thought *I* was the queen, but I see there are hundreds." So the king made a law specifying what silk garments could be worn by different social grades.

Queen Elizabeth was the first woman in history to wear a pair of knitted silk stockings. Previous to that time cloth stockings had been worn, which may account for the fact that women in those days "did not have legs." Even the queen's silk stockings were crude products; but she was so pleased with the delightful feel that she declared she would never again be happy in cotton stockings.

Nobles in the reign of Francis I found silk so much to their liking that they wore it as often as their women. Under those economical sovereigns, Henry II and Francis II, edicts curtailed the use of silk. Marguerite of Valois, Queen of Navarre, had many lovers. One after another died violently. Tallement de Teaux describes Marguerite's gruesome method of keeping alive their memory in "an immense hoop petticoat with little silken pockets all around it. In each of these was the heart of one of her dead lovers, for she had taken the trouble in every case to have the heart embalmed." Never was silken gown put to eerier use.

Napoleon's mind frequently turned from matters of state to the dressing of Josephine. A lady-in-waiting tells of entering Madame Bonaparte's dressing-room one day and finding him seated on the floor watching his wife try on a new dress. Josephine set the fashion for Europe, and the export of French silks during her reign as empress was ten times as great as under Louis XIV.

What was the first origin of silk? It was the little slant-eyed wife of a Chinese emperor who first thought of stealing from *Bombyx Mori* the luxurious coffin wherein Nature saw fit to perform her shining miracle. That was many centuries before Christ, and her name was Lady Si-ling. She was deified and worshipped as the Goddess of Silk. As long as the monarchy lasted in China, offerings were made to her each April by the reigning sovereign of China at a temple in the palace grounds at Peking.

The Lady of Si-ling encouraged the cult of the mulberry tree and the rearing of worms. She also discovered how to reel silk, a slow and tedious process, and how to weave the thread into cloth. The Chinese credit this same lady with making the first silk loom.

Naturally, as travelers began to find their way into the cradle of civilization, all that saw silk garments coveted them, and it was not long before China was selling silks to Persia. The Persians introduced silk to the rest of the world. But the Chinese were too crafty to reveal the process by which silk was obtained, and all sorts of stories grew up as to its origin.

Some believed beetles and spiders to be the source; others, among them Aristotle, that it was a special kind of earth combed out fine. Still others thought that in China there grew strange sheep with a silken wool. Some poetically imagined that it was the woven hair of languishing maidens.

In the middle of the sixth century the Emperor Justinian sent two monks from Constantinople to China, instructing them to learn the true origin of silk and the process of its manufacture. After a long, wearisome journey they returned, carrying within their hollow bamboo canes the germs of an industry that was to enrich all Europe — the eggs of Oriental silkworms.

The industry even spread to America. James I, King of England, made valiant efforts to establish silk production in the American colonies, and even offered bounties to all who planted a certain number of mulberry trees. In Georgia a settler had to plant 100 mulberry trees to every ten acres of ground in order to validate his land grant.

But the work of caring for the silkworm is too tedious a process for the restless Anglo-Saxon, and has never been really successful among any but Oriental peoples and, to a degree, in Spain and Italy.

Sixty years ago man began playing with the idea of producing silk artificially. French inventors noticed that the silkworm feeds on cellulose in mulberry and oak leaves. Now, man has perfected a process whereby he turns the cellulose from wood pulp, largely from spruce and cotton plants, into a brilliant, lustrous thread resembling silk, yet different. This new substance is responsible for most of the silk stockings on the market today, and much of the silk underwear; and it is also responsible for the fact that today's working girl clothes her slender, unabashed legs in stockings that would have been the envy of Good Queen Bess.

Fordisms

Condensed from Forbes (September 1, '29)

An Interview with Henry Ford by B. C. Forbes

Mr. Forbes is Publisher of Forbes Magazine

YOUNG people say there are no opportunities. Why, the world's opportunities are only beginning to break. Every generation leaves more opportunities than it found. Compared with today the opportunities of 50 years ago were startlingly few.

Think of the airplane, electricity, motor transportation, radio, distributing, merchandising — everything that enters into modern life. The best steel today lifts only 2000 pounds; by and by it will be made strong enough to lift ten times that. The key to the advancement of aviation is more power from less weight. As Mr. Edison says, we don't yet know one-millionth of what there is to be known. Practically every field of human endeavor is hungrily demanding research. Opportunity! It beckons to the earnestly-minded youth on every side. . . .

The more alive you are, the more eagerly interested you are in what you're doing, the less sleep you need.

I know that when we were working at full tilt to get our new car just as near perfection as we could make it before going into production, I needed even less sleep than usual — and my normal night's sleep is only six hours. I am usually up before six o'clock. . . .

If all the men over 50 got out of the world, there would not be enough experience left to run it. We are told that 10 to 20 years have been added to the average life of human beings in modern times. This, coming at the experienced end of life, is tremendously valuable. . . .

What Russia needs is motor cars, tractors and roads. Tractors will enable them to bring wealth from the soil. Given motor cars, they will become ambitious to build good roads. Thus they will revolutionize their transportation.

I became interested in Russia because I saw a big thing there.

I don't care if I don't make anything out of them. We offered them everything we had without expecting to get any profit whatever. I told them, "Whatever you find here, you are welcome to." We put all our processes, all we have learned, all our plant plans, everything we had, at their disposal. When they asked us to give them men to direct and supervise the construction and

operation of plants in their own country, we gladly agreed to do that, too.

I feel the same way towards England and towards Ireland — as well as South America and, for that matter, every other country. We should not forget that Britain and other countries sent pioneers over here and that they had a big share in building up this country.

The time has now come when some of that same pioneer spirit is returning to its original home. Turn about, you know, is fair play. Our own young country now is full of the pioneer spirit, but where did we get it? We must never forget that it is a heritage from other lands. That should curb our boastfulness and allay Europe's fears.

My father came from Ireland. His father lived in England. Naturally, it gives me real pleasure to be able to do anything along sound business lines which would help these countries.

As you know, we have arranged to build all our tractors in Ireland, even those to be sold in this country — we are allowed to bring them in free. Ireland needs industry. It so happens that we will be able to make our tractors as cheaply in Ireland as anywhere else. Ireland, indeed, is better located as a base for supplying the world with tractors than we are here in Detroit. We can ship from Ireland by water to all parts of the world, whereas here we have to ship a thousand miles by rail.

When we ship tractors from Ireland here, we develop trade between the two countries, helping employment and helping business in general in both.

We are hopeful that what we are doing down in South America, in the way of starting to raise rubber on a big scale, will benefit that part of the world. We are clearing and planting a million acres along the Tapajos River in Brazil. We are under contract to plant so much every year.

In doing this, we will bring to that remote part of South America practical knowledge of modern civilization. Our force will include doctors, nurses, teachers, scientists. We will construct up-to-date buildings. We will teach them sanitation. We will teach them transportation. We will, in short, bring, as far as possible, the life and the methods of the United States of today into the midst of these people. And, of course, we will spend millions in wages, which will give them a new purchasing power.

That is the kind of work that I call worth doing.

The rubber people in the Far East don't have the right idea. Their economic ideas are out of date. Their ambition is not to

give the world as much rubber as possible at the lowest possible price and thus increase its consumption, but to go in for artificial restriction. Instead of restricting the supply of rubber they should be working to increase the uses of rubber. The rubber industry is still in its infancy. When we begin to pave the streets with rubber, we shall get an idea of the future that awaits the rubber business.

I am not afraid of what the newspapers call the Power Trust. All the power resources of the country should be linked together under one control and every part of the country supplied from the logical distributing point. Power is all-important. You cannot do a thing without power. And the very best power now is distributed by big concerns.

Like everything else, a Power Trust would have to have at its head one man — a monarch, if you will. You cannot have two or more heads running the same enterprise. Always there must be some one man whose authority is final.

A real Power Trust should have at its head a man like Alex Dow, who has been head of the Detroit Edison Company for more than 30 years. Why, he has treated the people so white that they actually like to go and pay their bills.

A lot is being said about the profits made by the power mergers. People shouldn't worry too much about that. Money keeps on flowing. The question is not "*Who gets the money?*" but "*What tangible asset is left to the people?*" The people always get the real gain, even though some man or groups may get the passing profit. The main thing is to get the power resources of the country put on a more scientific basis. After all, it is the actual results achieved which count most. These people won't be able to take their money with them, and they will leave behind them a country more efficiently equipped with power.

What they are doing is helping to have the country become more conscious of the importance of what electricity can do for them. Only a beginning has really been made in making electricity do the work of the world. Power can revolutionize the lives of the people of this country. It can lift the burden from the backs of the workers. It can abolish most of the tasks of the housewife. It has hardly made a beginning on the farm — where its possibilities are perhaps the greatest of all.

Where Logic Reigns Supreme

Condensed from The Bookman (September, '29)

Janet Rankin Aiken

OUR language, in nearly every detail, is illogical. In this lies a charm.

Imagine two human beings in the extremity of despair. One says, "I cannot but die." The other says, "I can but die." If words mean anything, one should die and the other live. But both die.

What difference can you discern between *ravel* and *unravel?* Or between "I wonder if she's there" and "I wonder if she's not there?" Or between "a matter of the first importance" and "a matter of the last importance?" Logically, by all rules of speech, these pairs should be contraries; in fact, they come to the same thing.

Let us consider other departments where logic reigns supreme. Do we have, as consistency would dictate, *myself, herself, ourselves, hisself, theirselves?* Or, what would be equally logical, *himself, themselves, yourself, meself, and usselves?* No, we must needs employ now a possessive, now an objective, pronoun. Consistency is nowhere.

English has *may* and *might, shall* and *should.* To be consistent it should also have *mote* and *must, owe* and *ought.*

When it comes to singular and plural, our language's notion of logic is hazy indeed. *Many a man* is undoubtedly as plural in intent as *many men.* Yet the former takes the singular *lives,* the second the plural *live.* A *domino* is a mask, but *dominoes* is (are?) a game. *Vapor* is steam but the *vapors* was (were?) a fashionable malady of the 18th Century. *Vesper* is evening but *vespers* is (are?) evening service. Do you use *this* or *these* with the singular words *odds, politics, news, pains* (i.e., taking pains), *wages, means, tidings?*

But the big story has been reserved to the end. There is one field wherein English beats the world, past and present, near and far, in this matter of illogic. That is spelling.

Did you know that there are over 20 ways to spell a sound which has no alphabetic symbol of its own in English, but which we call the *sh*-sound? Then let me marshal for your inspection the words *she* (sh), *sugar* (s), *chandelier* (ch), *nation* (ti), *schist* (sch), *barouche* (che), *tension* (si), *fuchsia* (chs), *session* (ssi), *fashion* (shi), *ocean* (ce), *omniscience* (sci), *vitiate* (t), *officiate* (c),

social (ci), and *nausea* (se). Now add to these *righteous* (teo), *latch* (tch), *anxious* (xio), *inflexion* (xi), and *nature* (tu), where the sounds in parentheses each represent two sounds, one of which is *sh*, and we have a total of 21 orthographic representations for this single sound. Could inconsistency farther go?

The answer is *yes*. For one vowel, the medial sound in *cake*, is found spelled in over 25 different ways. With little study I have found 26, and a thorough research would probably add to the list. Would you care to hear it? Then consider *pale* (a-e), *paler* (a), *pail* (ai), *play* (ay), *gauge* (au-e), *campaign* (aig), *champagne* (ag-e), *straight* (aigh), *freight* (eigh), *vein* (ei), *they* (ey), *reign* (eig), *steak* (ea), *fête* (ê), *coupé* (é), *ballet* (et), *demesne* (es-e), *prayer* (aye), *praise* (ai-e), *parfait* (ait), *mêlée* (ée), *métier* (er), and add to the list the British pronunciations of *gaol* (ao), *eh* (eh), *dahlia* (ah), and *half-penny* (alf).

English has some 44 sounds, 24 consonantal and 20 vocalic. To represent these 44 sounds in spelling, English has well over 400 separate orthographic combinations, making an average of 10 possible spellings per sound! What can you do with a language like that!

The magazine, *Liberty*, for October 29, 1927, might well have been called the Constance Talmadge Testimonial Number, for the name of this motion-picture actress was used in no fewer than nine different advertisements appearing in it. First, there was Constance Talmadge "being waked by an Ansonia Squareclox"; then, the Benrus Watch Company displayed "on the alluring wrist of Constance Talmadge the watch of your dreams"; a few pages farther along Miss Talmadge wore the Juliet Wedding Ring of J. B. Bowden and Company; under the head "No More Flat Tires," the same lady expressed the belief that "Air Containers are a blessing"; an advertisement of the obesity remedy, "Marmola," showed a full-figure picture of Miss Talmadge, quoting her in behalf of the nostrum; then, there was Miss Talmadge "using her sure-fire Thorens" (a cigarette lighter), Miss Talmadge's alleged approval of Dentyne Chewing Gum, of Gold Seal Radio Tubes and, finally, of First National Super-Movies. There may be a better example of the testimonial habit contained in some other single issue of an American magazine or newspaper, but if so I have never heard of it. — *Arthur J. Cramp* in *The American Mercury*.

Fruit Tramps

Condensed from The Century Magazine (March, '29)

Percy Walton Whitaker

MICKEY and I are genuine fruit tramps, and are considered good ones, that is, fast workers. She is my better half, and the nickname was bestowed by brother and sister tramps.

Many of our relatives quarrel with us about our mode of life, but we pridefully retort that we fruit tramps have a profession. Much skill is required: it is necessary to have a good working knowledge of tomatoes, lettuce, cantaloupes, plums, pears, apples and grapes, including the various packs, sizes, boxes and receptacles into which this assortment goes. This must be backed up by dexterity, adaptability, memory, neatness and all-round proficiency, and above all by speed, and still more speed — for without swift movement the game is not worth the candle. Skill in all these things must be demonstrated under the watchful eye of a super fruit tramp, the foreman; and he is a post-graduate, and not to be fooled.

Mickey and I began our year with olives, in a huge plant with 1100 concrete pickling vats, each vat designed to hold about half a ton of olives. This kind of work is really outside the sphere of the real fruit tramp, but we had bought our car on credit, and the orange crop had failed and the finance company wanted its money. We waived dignity and stayed five months — which paid for the car.

Spring was in the air by the time the last vat of olives was put in the cans. Our tires were new, and the meadow-larks sang blithely in the fields. The little motor purred contentedly, and the open road beckoned alluringly. It's a great feeling to be starting out for parts unknown. But there was work ahead and we met a man who knew all about it.

Two hundred miles away, the lettuce men were sending out frantic calls for help. The crop had matured before the Colorado basin sheds had disgorged their hands. Our informer drew a vivid picture of countless acres of succulent lettuce, shimmering crisply green under a moderate sun. If the weather held good there would be big money for all the crew. But let showery days come, with a hot sun steaming the fields, and the dreaded "slime" would destroy the crop in jig-time.

When we arrived we were en-

gaged as trimmer and rustler by the car-load unit of payment. Our crew, all partners, consisted of eight girls (trimmers), four packers, a man to line the crates with paper, one iceman, who with a trident shaves into pieces the 400-pound blocks of ice, one car-loader, one trucker and a lidder. Every time the refrigerator doors were fastened and sealed on a carload, each of us had earned three dollars and a half. To load a car in two hours is called good time.

There are two crews in this shed and they race eternally. "Come on, barbers," calls a packer to the trimmers, "shear those heads faster, and you can have all my money." If one of the crews wins by a single crate, jubilant shouts announce the fact — it's a win just the same.

For two weeks the lettuce crates were filled at a furious rate, and then the dreaded showers came. The destroying slime developed so rapidly that more heads were thrown into the dump wagon than into the crates. After two poor days, the season ended abruptly. In this business money is won or lost quickly. One grower gamely refused $20,000 for a fine crop of 100 acres, saying he would win all the profit or nothing. The "slime" got it. He plowed it under, but one week's favorable weather would have netted him $40,000.

After the "slime" tragedy had cleaned out most of the lettuce men, we found three weeks' work packing Valencias and other late oranges. Mickey is a good packer and throws oranges into artistically designed wrappers with a skill and finesse that yields about ten dollars a day. So we added several hundred dollars more to the treasury.

The peach crop came next, for the cherries are largely handled by the Orientals, and do not count in the big money. There was peach-thinning, however, and we took a chance at that as a sideline.

In some places, trees, like men, suffer from overweening ambition. The peach tree is a shocking example. It blossoms and starts about 40 times the amount of fruit it can well carry. This must be thinned or worthless peaches will desolate the grower's hopes of profit. We took a contract to thin for 40 cents a tree, and earned our money fairly. We climbed 12-foot ladders and tore off peaches with both hands. Often the ladder bucked from under, leaving us clinging to a limb vainly kicking in space. Except for the sand it wasn't such bad work, but dust under your clothes is one thing to which you cannot become reconciled.

Next it was the peach cannery. Many fruit tramps take the canning season under protest —

for the men work by the hour, only the girl cutters and canners doing piecework. However, Mickey developed into a fast cutter, making about six dollars in eight hours, and my checking job, punching the cards of the cutters for each job completed, paid about the same.

Everything is hurry and bustle in the cannery, and the master noise is the eternal clanging of tin cans rolling down the little chutes. Cans by the hundred thousand move, apparently of their own volition, to the exact spot where they are wanted. Unbelievable quantities of cut peaches, yellow as gold, slide along the belts; white and golden unpeeled peaches were hustled by belts into the lye-room, to come down again with their skins removed, in shimmering cascades six feet wide.

When the weeks came in which the immense crop of peaches ripened too fast, we worked overtime, 14 and 16 hours a day, and it became a penance to get up in the morning. But the money compensated. The girls dreamed of dresses and hosiery, and the men of better cars. Yet I think we all rejoiced when the season ended.

Now the real hejira begins among the fruit tramps. September has come and gone and many of the canners go back to school. The fast apple packers leave for the apple belts in fast cars: $15-a-day men can't afford to travel slow. Some will cross the wild Yakima to secret destinations where only a chosen few may work, but the rate is the highest in the land. They won't tell you where it is, but they will tell you that they don't want you along.

This year we decided not to make apples, as the phrase goes, and headed south into the red grape country. It was a good guess, for we did well. Mickey averaged $40 a week, and with much overtime I reached $60; and it held steadily for nine long weeks. I learned from these ranchers what it is to be game. The land was overflowing with grapes — the biggest crops ever. Each variety harvested had glutted the market, and all varieties overlapped. The help got all the money, but these growers smoked and laughed through it all, and made ready to play the game another season.

This job finished our year, with earnings well up to $3000 — and see the time we had. Mickey and I have become typical fruit tramps. We hate the small-town idea of doing the average thing, and we do not want a house and lot. I don't believe any one really does — it's just something real estate men sell to you.

The Big Punch

Condensed from Collier's (September 7, '29)

Rob Wagner
Technical Director of a Motion Picture Studio

THE movie fans know that scenes of earthquakes or cyclones are artifice rather than realism. Unfortunately, they are firmly convinced that everything we do is trick-camera work. They yawn at our greatest punches. In this article I shall try to restore the kick, for, believe it or not, brother, there is more drama in the making of some of our big punches than ever shows on the screen.

Take the ship scenes. It is true that we may shoot the long, establishing shot at sea or in a miniature, but the real rough stuff aboard ship has to be done on the lot. The deck and superstructure are built upon a huge rocker surrounded by high trestles holding aloft immense water tanks. Wind machines and lightning gadgets complete the equipment.

A while ago the DeMille studio was shooting the Wreck of the Hesperus, and the action called for the crashing of the mast to the deck. The complication lay in the fact that Virginia Bradford, in the rôle of the skipper's daughter, was lashed to it. It was not possible to use a dummy, or even a double. For the director specified that the mast must make a complete turn in falling, and in so doing swing close to the camera so that there might be no doubt that Virginia was indeed making the scene; then, finishing the turn, it must fall so that she would be on the top side!

That was where the technical staff came in for a bunch of headaches, for obviously we could not rehearse such action and smash up an expensive set. For several days we figured our stresses and strains and the pitching of the ship, and then finally arranged our guide and tensile wires. On the night scheduled for the shot we were all as nervous as wire-haired fox terriers, but we didn't dare show it for fear the courageous little star should feel the contagion.

At a signal from the T. D., a bolt of lightning struck the mast and it began to fall. For an instant it looked as though it had got away and would fall straight over on the camera crew and kill others besides the star. But a signal to crew No. 4 pulled it back into place. It swung past the cameras and Virginia's terrified expression was beautifully registered. Then it crashed to the deck, with Virginia on top!

Perhaps you can visualize the corrugated brows that appeared in the technical departments of the Lasky studio when handed the script of The Ten Commandments. The Mount Sinai storm was, up to this time, the biggest punch we had ever staged, both in the immensity of the set and the number of people employed. So complex became the cues for the crews of ten wind machines, ten lightning gadgets, and various dust throwers and juicers, that their signals had to be worked from a keyboard like a typewriter.

That scene was comparatively easy. But Pharaoh and his host swallowed up by the Red Sea! Not so easy! The script called for a running shot showing the horses tearing ahead of a wall of water that was about to engulf the whole works. We decided to have the horses running on a treadmill. The set was built, and for six weeks those horses actually lived on that treadmill. During the first weeks we walked them; later on they cantered; finally we got them to run like mad. And they loved it! Then in the sixth week we began to dump a little water on them — gradually at first — until they were used to their daily ducking.

At last everything was set for the big splash — which, of course, we couldn't rehearse. On came the horses with Pharaoh lashing them to greater speed, and with more and more water being dumped on them. Then the triggers of the big tanks were pulled and tons of water came tumbling down in an engulfing and terrifying torrent. It's nobody's business how Pharaoh and the horses were saved from complete annihilation, but just tell any one of them that that scene was made from a miniature, and see what happens.

Perhaps you remember Douglas Fairbanks riding a phantom horse across high heaven in The Thief of Bagdad. Well, it took over a month to train that horse for his lofty flight. The first week he walked up an incline carefully guarded by fences. The next week he galloped. The following week he galloped with one fence removed, then with both fences removed and finally with the blinding lights turned on. One minute on the screen and one month to make! Do you wonder that pictures cost money?

And oh, the grief in fire scenes! This also is stuff that can't be rehearsed. I recall one scene in which Tully Marshall had some dirty work to do in a bank during a fire. The set was blazing in every direction, and all the script called for was that Tully should walk through the "dead spots" — that is, the path that had been left ungasolined — and which had been carefully marked on the floor. He had gone about halfway

to his destination when a smoke pot overturned, completely enveloping the set in an opaque blanket.

Tully lost his way and began to stumble over the burning furniture. Fortunately there was a wind machine near by, and at the risk of burning the whole studio we turned it on and swept the set clear of smoke, at the same time working the extinguishers. At last, in a corner, we found Tully — completely out, his clothes half burned off.

In another sequence I worked on, Conrad Nagel was supposed to carry Leatrice Joy through three burning rooms to safety. This time it was a prop boy's bungling that nearly lost the studio a couple of perfectly good stars. He had gasolined the set, but his can leaked and dripped the whole length of the dead spots. Conrad, carrying his delightful burden, hadn't gone five feet when I realized he was earning his salary. He was completely surrounded by fire. Figuring that there were dead spots ahead, he kept plunging forward — but there weren't any dead spots. It was a real rescue! Conrad's legs were painfully burned, and Leatrice's arms scorched.

In doing battle scenes, where men and horses come dashing across open fields of exploding mines, we have to sift the earth covering the charge for fear of rocks and pebbles actually becoming bullets; or, if it is close stuff, we must cover the dynamite with granulated cork or sawdust.

Then there is always the danger of a premature explosion or inaccurate bomb-throwing. In Beau Sabreur one of the prop boys became excited, missed his cue, and in his confusion threw a bomb directly in front of the cameras. He nearly ruined three $4000 instruments, to say nothing of the poor crank turners, all of whom looked as though they had just emerged from a comedy sequence. However, their week in the hospital was anything but comic.

In a comedy I worked on, Wally Beery and Zazu Pitts were engaged in making bread, when a shell from a distant battle came through the window and landed in the dough. The scene was played for suspense, the audience thinking the mess was intended to explode in their faces. The plan, however, was to have the thing blow just as they turned away from it, but something went wrong with the timing and they actually did get it right in their faces. Of course the scene got a big laugh. Oh, it was very funny! But not to Wally or Zazu, nor to us.

Incidentally, how would you like to make a scene like this? You are sitting at the table, and

every time you pick up a cup or plate some villainous dastard outside the house shoots the thing right out of your hand. Well, Anna May Wong played a scene like that. We tried in every way to cheat the action, but finally decided the only way to get the scene right was actually to have the things shot by a sharpshooter. Everything went fine until Anna was walking across the room with a cup in her hand. Bang! Off flew the cup! And *Anna collapsed to the floor!* Rushing out, we picked her up. But we could find no wound. A piece of broken china had struck her in the face, and, thinking she had been shot, she fainted.

And now come with me into the temple of Pharaoh. In a few minutes an $80,000 set is to be wrecked and the lives of scores of people endangered — just to give you a thrill. For five solid weeks the technical crews have been building and trying out the mechanical "trips" that are to collapse the huge structure according to a very definite plan. Everything must fall exactly where we wish it to, or there WILL be death and destruction.

We rehearse all this action on an empty stage using dummy débris. This permits us to mark the spots where the real things will fall in the actual scene. With our timing and falls all spotted and numbered, we next rehearse the action with the full cast — still using dummy débris. The terrified people will be running about in apparent confusion, but every person has a definite line of action — otherwise, *good-night!*

At last the great scene is on — a magnificent debauch in the palace of an ancient king. Then comes the word which throws terror into the revelers as it roars out of the loud speakers: "EARTHQUAKE." Now the counting begins, the assistant calling: "ONE! Hey, you foreground people, not so close together! . . . . . TWO! . . . . THREE! (The throne totters, and Pharaoh scrambles down.) . . . FOUR! . . . Watch your step at H now . . . FIVE! (A chunk of roof falls) . . ."

Thus to the end, when Pharaoh lies in the foreground pinioned beneath the huge temple column. Everybody stands dry-mouthed waiting for the dust to clear.

Victory! A few minor accidents that will be treated in the studio hospital, but the camera men smilingly report everything "oak." But listen, brother, if group D had not been in its place at the count of 17 it would have gotten a ton of artificial stone on its head, and if anybody in group J had missed his cue we would have picked him up on a blotter, for No. 21 was real stone!

For the first night in six weeks the technicians sleep peacefully.

The Black Art

Condensed from Natural History (July–August, '29)

Margery L. Loeb
Department of Anthropology, American Museum of Natural History

A SOCIAL worker in New York City found to her amazement that the Italian tenements of Mulberry Street housed numerous sorceresses who carried on a prosperous business in charms and incantations, and that in hall bedrooms people were piercing effigies with darning needles and scorching them over the gas flame, to destroy their rivals in love or other persons against whom they bore a grudge.

Indeed, we find the vestiges of magical practices persisting even in the commercial centers of our big cities. When hard-headed business men in the silk industry feel that they must discard a textile design based on peacock feathers because of the superstitions associated with this bird, and when skyscrapers, the symbol par excellence of the 20th Century, commonly omit the number 13 from their floors and rooms, it seems evident that even in this rational age the deep-rooted belief in the potency of certain talismans to divert the forces of destiny still has a foothold.

There is probably no people among whom some phase of the magical complex may not be found.

Perhaps the most widespread magical practice is that of working the desired end on an image or effigy. It is practiced today in the Italian community in New York, among the Pennsylvania Dutch, among many European peasants, and by primitive peoples from sea to sea. It frequently explains the difficulty explorers have in photographing natives, for many savages feel that with so exact an image in his possession, the white man's power over their persons would be unlimited.

The Peruvian Indians, to kill an enemy, moulded an image of fat mixed with grain, and then burned the effigy on the road where the victim was to pass. The aborigines of Victoria, Australia, drew on the ground rude likenesses of their enemies, and condemned them to destruction with cabalistic ceremonies. The incantation was so dreaded that persons who learned that it had been directed against them were often known to die of fright. A Malay desiring revenge repaired to a medicine man, who made an image of his client's victim, and, muttering a spell, fastened it to a tree by driving a sharp point through the navel until the sap

of the tree ran through the hole. The oozing sap was believed to be the life-spirit of the victim, who, it was supposed, directly began to suffer from a deadly ulcer which could only be cured if a friend secured a piece of wood from the tree to which the image was attached. When so extreme a revenge is not desired, many formulæ prescribe that the eye of the image be pierced to render the victim blind, that the stomach may be pierced to make him ill, or the head to give him a headache.

Before going to battle, the Iroquois Indians pick out a rotten log to represent the enemy they are about to attack. This they put in a hole in the ground and, dancing about it and jeering, they hurl their lances into it, crying, "Where is your power now? My lance is in you to the hilt." Their actions and their jeers insure a similar victory over the real enemy.

Imitative magic is equally popular as an agent for realizing happier and more gracious desires. Young Ojibway men and women carried about with them little images of the person whose love they wished to win. These were regularly pierced through the heart and magical powders were rubbed into the hole. A common practice of ancient witches was to melt a heart of wax in order that the heart of the loved one might also melt.

Numberless are the imitative devices to secure success in hunting. The unsuccessful Cambodian hunter, in order to change his luck, strolls in the direction of his nets and, pretending that he does not see them, lets himself fall in, saying, "Hello, what's this? I'm afraid I'm caught."

A Malay, watching crocodile traps, must gulp down the first three mouthfuls of his curry, just as he desires the crocodile to swallow his bait. Accordingly, a friend must take out all the bones, lest the hunter find himself in the position of having to choose between swallowing a bone and losing a crocodile.

The imitative potence of a charm may lie in the meaning of the words. Thus a Malay hunter may use the following incantation to create in himself the power to face the dreaded tiger, and to strike fear into the heart of the beast:

Oh Earth-Shaker, rumble and quake!
Let iron needles be my body-hairs!
Let poisonous snakes be my beard,
A crocodile my tongue,
And a roaring tiger in the dimple of my chin.
Be my voice the trumpet of an elephant,
Yes, like unto the roar of the thunderbolt.

Even the actions of persons far away from the scene may by some fortuitous similarity influence the success of an exploit. While the Eskimo crews are at sea hunting whales or walrus, no work which necessitates pounding or hewing

must be undertaken at home, because the game might be frightened away. Nor must the bedding be raised and shaken, for if it were, the ice would crack and drift off under the hunters' feet. The wife of an elephant hunter in Laos must not cut her hair nor oil her body while her husband is on the chase. Cutting her hair would cause the elephant to break his bonds, and oiling her body would render her husband "butter fingered," and the game would slip through his fingers.

The medicine man makes use of imitative magic as a cure for many ills. The following illustration from the Dyak of Borneo could be duplicated from many parts of the world. The medicine man called in to a case of serious illness will pretend himself to be dead. He will be treated exactly like a corpse, wrapped in a shroud and laid outside on the ground. After about an hour, other medicine men will undo his bonds and bring him back to life. As he revives, the patient is supposed to recover too.

The Pueblo dances of the arid Southwest are almost all directed toward the bringing of rain. A feature of some of these dances is to throw sacred corn meal into the air, letting it drop in imitation of the rain.

Another principle of magic that is equally widespread is that of contiguity. Thus, since the number 13 had once been associated with the catastrophe of the Last Supper, anything to which it was subsequently applied would also attract to itself a doom of misfortune.

The widespread notion that the treatment of a weapon affects the wound it has inflicted is an expression of contiguous magic. In Melanesia, when a man has been wounded, his friends make every attempt to secure the arrow with which the injury was done. If they succeed, they wrap the weapon in damp leaves and deposit it in a cool place, that the wounded man may not become feverish. Meanwhile the enemies will be chewing irritating leaves or drinking hot and burning juices in order to inflame the wound. Or, if the enemies retain possession of the arrow, it is thrown in the fire so that the wound may burn as well. And occasionally they amuse themselves by twanging the bow-string in order to give the injured man a similar twinge of pain. This idea is firmly believed in rural communities in parts of England. A conscientious groom will carefully grease each day the nail which has penetrated one of his horse's feet, in order that the cut may heal quickly.

What Do You Say to Yourself?

Condensed from The American Magazine (October, '29)

Harry Emerson Fosdick
Pastor of the Park Avenue Baptist Church, New York City

WE all talk to ourselves. Each of us is not one, but two — "I" and "Me" — and with endless persistence these two confer. And most people do scant justice to the immense importance of this inward conversation.

Repeatedly in my confessional conferences, for example, I run upon the results of talking to oneself cynically. What's the use? What does life amount to, anyway? — Everyone knows how easy it is to drop into this sort of self-communion. A man who allows himself to do this thinks he is "only talking to himself." As a matter of fact, he is fairly murdering himself, and in time the process will land him where it landed a famous friend of Horace Walpole's, who wrote: "I fear nothings, I speak nothings, I take interest in nothing, and from nothing to nothing I fare onward to the moment close at hand when I shall become nothing."

People confuse being cynical with being philosophical. They mistake their emotional discouragements for wisdom, and when they say to themselves, "Life is a bad joke," they suppose they are being hard-headed philosophers. Such words fill the air today. They fly from tongue to tongue. They rage like a pestilence in some of our popular literature. They debilitate personality. For there is no shorter road to an inner hell than cynical conversation with oneself.

The influential power of inward talk is illustrated by the way popular catchwords, repeated constantly in the privacy of the mind, affect the life of a generation. "I can get away with it," "It will get me by." In consequence of such an attitude, watch students in our schools content merely to pass, business employes satisfied barely to hold their positions, ministers going into their pulpits half prepared and trusting to gusto to get away with it, and all that sorry degeneration of craftsmanship in labor, described by Kipling as "All along o' doin' things rather more-or-less."

This sort of thing would not be possible if, in the intimacy of the mind where men talk to themselves, shoddy words like "I can get by" were not prevalent. For some words that men use to themselves are tonic, while others sap energy, undermine morale, and end in spiritual anemia.

Many persons habitually talk about their lives in terms of obligation and necessity instead of in terms of privilege. They say to themselves, "I must," in a driven tone of voice, instead of saying "I may."

In the late war a young French soldier, very white and weak, lay on a hospital cot. The surgeon who had just amputated his arm looked at his drawn face and said, "I am very sorry you had to lose your arm." Then the soldier's eyes opened, and with an accent of protest he said, "I did not lose it, I gave it." He was wise enough to see that his whole attitude toward the necessity that confronted him depended on what word he used.

To be sure, compulsion, necessity are real facts in life. But we have a choice as to how we shall talk about these things to ourselves. There lies the secret of the free souls whom life has never been able to reduce to slavery.

Necessity says to a child, You must get an education; and a wise child answers, What a privilege! Necessity says, You must earn your livelihood at such and such a trade; and a wise man replies, A most interesting trade — let me at it! Necessity says to all of us, You must grow old; and instead of making fools of ourselves trying to seem sixteen, the wise man or woman says that life's autumn can be made lovelier than its spring.

Then there are such phrases as "Everybody's doing it," "This is the latest thing," — what amazing power such words possess when a man uses them to himself. They make us slaves of the prevailing mode of conduct, no matter to what extent our individual tastes are offended.

Lord Tennyson complimented an English queen in this ringing phrase: "Oh loyal to the royal in thyself." That is the ultimate basis of a vital morality. And how many a man, if freed from the hypnotism of those cowardly phrases, has royal standards within himself! If he could change the key of his self-communion, and become loyal to the royal within himself, he might talk himself out of being a chameleon into being a man.

Of all the ruinous ways of misusing this power of inward conversation none is more prevalent than the habit of breaking down one's own courage by defeatist words: "I cannot," "I am whipped," — what an endless amount of such anxious and enfeebling talk is going on!

I do not mean that every problem can be solved by talking rightly to oneself. There are situations where our plans inevitably fail, disaster befalls us, and we face that most difficult of necessities — not to *do*, but to

endure. Nevertheless, some of the finest work accomplished on this earth has been done by handicapped men who never could have done it if they had talked to themselves with defeatist words.

Did not Beethoven go deaf? He tells us, however, just what he said to himself: "I will seize fate by the throat; it shall certainly never wholly overcome me." Whenever I listen to the glorious music of the Ninth Symphony, I always see deaf Beethoven writing it.

In any situation, however difficult, a man can at least do his best, but no one ever does that with defeatist words.

Even when a man has really come to the end of his rope and there is nothing more that he can do to prevent his affairs from collapse, he need not be a failure himself. Some of the most inspiriting characters in history have failed in one sense. That is, they were given hemlock to drink, they were crucified or burned at the stake. They, themselves, however, were not failures. They were shining successes. St. Lawrence, the Martyr, was roasted to death on a grid. After they had had him over a slow fire for some time, so the story runs, he looked up at his torturers and said whimsically, "Turn me over. That side is done." That man was not a failure.

One of the commonest keys of inward conversation is quarrelsomeness. Some people's minds are mental cockpits and there is always a fight on. Forever to be engaged in an inward conflict, writing imaginary letters attacking somebody, constructing imaginary conversation berating somebody, or pummeling our own selves with wordy bludgeons, is utterly disruptive to personality. Anxious self-communion is bad enough; probably angry self-communion is worse.

I have not tried here to cover the whole ground. If I had wanted to do that, I surely could not have omitted the large subject of downright nasty self-communion with which many people try to compensate for an outwardly rigid and conventionally proper life. Jesus knew what He was talking about when He spoke of some folk who were externally painted white but within were full of dead men's bones and all uncleanness.

What I have wanted to make plain is the crucial importance of our occupation when we are "only talking to ourselves." Inward conversation pitched in the key of cynicism, shoddiness, discouragement, cowardice, anxiety, defeat, quarrelsomeness, and smut, is doing more to wreck human life than pestilence and war.

The Good Old Times at College

Condensed from The Saturday Evening Post (September 14, '29)

Christian Gauss
Dean of the College, Princeton University

THERE are many alumni who assume that colleges have been steadily degenerating and that somewhere in the past lies a golden age. They refer so frequently to "the good old times" that it becomes worth while to inquire how good these old times actually were.

In the volume called *Yale Yesterdays* there is an amusing picture of the Yale Men of the 70's around the Pump. Yet that picture was not intended to be funny. In the 70's Yale men no longer hewed their own wood, but they did draw their own water, for there were no spigots in the dormitories, and every man was his own chambermaid.

The first building at Harvard was primitive and far from weatherproof. The rooms were dingy and cold, as only a portion of each sash was glazed, and oiled paper was used in the rest. When, in New England's winter, their small dark studies were frigid, the boys carried their books to the hall, where a fire was maintained at the expense of those who used it. This probably means that those who could not contribute were not allowed to have places near it. On these bitter nights the boys read by the flickering flame of the "public candle."

From this semicircle of light and warmth they must have slunk away shivering to the icy cubicles where they slept. It will be readily granted that it was heroic to begin higher education in America under these Spartan conditions. It is often overlooked, however, that for nearly 250 years living quarters and meals provided for American students were pitifully inadequate.

Corporal punishment, often in the presence of the student body, continued at Harvard until the middle of the 18th century. As late as this period, breakfast was still two "sizings" of bread and a cue — half pint — of beer, and "evening Commons were a Pye." It was still necessary, in the second half of that century, for the student to carry his own knife and fork to the dining room, and when he had dined he wiped them on the tablecloth. At Yale as late as 1815, students drank cider out of a common pewter pitcher, since the university could not afford tumblers.

Blackboards seem to have been first used in 1824. Before that

time college men did much of their work on slates.

Library facilities were pitiful. After Harvard had been in existence for 100 years the library contained 3500 volumes, two-thirds of which were theological. In the ten years from 1743 to 1753, the total accessions to the Yale Library numbered 31 volumes, "mostly sermons." In 1782 Brown University had between two and three hundred books, and not well chosen, the president wistfully adds, "being such as our friends could best spare."

There was, of course, no gymnasium, and no facilities for social life or recreation, except the debating societies. In many cases we find a lack of what would now be called the decencies of life. The trustees' report of the University of Georgia, made in 1826, says:

> The charge of want of cleanliness may well be maintained against every room in both buildings. Filth is found of such sort and in such quantities as to be offensive and doubtless injurious to health.

In Princeton refuse was disposed of by the direct method — it was thrown out of the windows! "Waste water of all kinds was projected from the upper floors, so that the lowest floor smelt to heaven."

Cows were generally pastured upon most of the college campuses until 1850, and pigs were kept to dispose of garbage. A dawning consciousness that these things were not as they should be appears in the recommendation of the Dartmouth faculty in 1840 that "the college back yard be immediately cleaned," and that "the experiment of scouring be made upon the windows of the recitation rooms." Evidently window washing had not previously been resorted to.

A considerable part of the revenue of the struggling colleges came from the rental of dormitory rooms. A student who chose to live in town had to pay the college an equivalent tax. Even so, at Dartmouth, rooms were so dilapidated that in 1845 20 rooms were unoccupied, "some of them positively untenable." Those who had to pay the heavy tax for not living in these rooms showed their irritation by breaking windows in the dormitories at least to the amount of the tax imposed.

If housing conditions were bad, the food provided was even worse. Here the records are unanimous and repeat the same dismal story. The undergraduate ate without relish and was forever in protest. Yet he does not seem to have been over-exacting. In 1798 at Harvard students were obliged to go to the kitchen door with their own bowls or pitchers for supper. There "they received their modicum of milk or chocolate in their vessel held in one hand and their

piece of bread in the other." In 1829, we learn, supper consisted of "tea, and cold bread of the consistency of wool." Necessity drove these underfed boys to "pin to the under surfaces of table by a two-pronged fork some slices of meat from the previous day's dinner." This practice of forking meat to the underside of the pine tables seems to have been an almost general college custom.

At Yale "the breakfast consisted of ollapodrida hashed up from the remains of yesterday's dinner and fried into a consistency that baffled digestion. This compound was known as slum. To these accommodations a senior or a tutor would prefix and suffix a grace, during the telling of which two forks were sometimes observed sticking into each potato on the table."

Plain living and high thinking would have constituted an admirable ideal for the American college of 1850, but the whole scale was too low. Even graduates of the late golden 90's at Princeton will tell you feelingly of the acute irritation they felt when, in a populous old-fashioned dormitory, they stood in their long line waiting for their one tub bath a week, and hooted and jeered while some sophomore, entranced by his rare privilege, overstayed his allotted time. There is more than an interest of curiosity in these recitals of unsatisfactory provision for creature comforts. Many abuses in the American college are traceable to this neglect. The abnormal growth of fraternities, social and eating clubs, and athletics, which have caused so much trouble, are not to be explained solely by the fact that Americans are "joiners" by temperament. The overemphasis on these things was in part the result of the total failure of the college to provide normally for the social life and healthful recreation of students.

It should be remembered that the age of munificent gifts to colleges has come for the most part in the past quarter century. It was the student of those supposedly good, but really quite hard times who made sacrifices for education. That early system provided a natural, if rigorous, method of selection. Until fairly recently few men came to college for "the life." They came because they earnestly wished to be preachers or teachers or lawyers or doctors. The hardships made of them a highly selected group, and this, perhaps, rather than the old curriculum or the old life, is responsible for their successes. They grumbled, and with cause, and it was just because the college proper did so little for them as social beings that, by way of compensation, they created that strictly American development — college life.

Where Every Prospect Pleases

Condensed from Vanity Fair (September, '29)

Deems Taylor

I RAN into him when I came down to breakfast; he in a straw hat and Palm Beach suit, with a Kiwanis button in his lapel, I in an early American bathrobe. I was not at my best, and I knew it. He ignored my costume, however, and proceeded to put me at my ease.

"Mr. Taylor? My name is Hubbel. I thought I'd drop in and see if I could help you with your pump problem."

I must admit I was flattered. For I have come to realize that the really big and reliable advertiser never does anything so vulgar as sell anything; he solves problems. And likewise, it is only the very highest type of substantial, successful consumer — the kind with a clipped white mustache who sits at a desk gazing out at the factory — who has problems to solve. Therefore I felt flattered and motioned Mr. Hubbel to take a chair. He had already done so.

"I'm with the Aquapumpo people — as a matter of fact, I'm their general sales manager."

Here was thrill number two. I had met salesmen before, of course: the bales of magazines that arrive every month are mute testimony to the number of striplings for whose college careers I have voted. Moreover, I possess one of the handsomest and most complete collections of Fuller brushes in America, and know that a request from a stranger for an interview regarding "an urgent personal matter of the utmost importance" means that the Loved Ones are about to go without meat in order to pay another insurance premium. But never before had I been face to face with a sales-manager. At last I was to be able to get down to brass tacks and talk turkey with a square shooter and have my problem solved.

My problem, as I had envisaged it in my simplicity, was to get a pump that would look after itself and cost practically nothing. This was not Mr. Hubbel's idea at all. He was there to help me, and in the process he made it clear that I was confronted by a very complicated situation. Had I considered, for instance, the question of Servicing? I had not.

"You know, of course, that the Aquapumpo is made right in this neighborhood?"

"Of course," I lied heartily.

"Well, you see what an advantage you have over other pump buyers. Something goes wrong, say in the middle of the night. You merely telephone our service station, where we maintain a crew of 14 experts 24 hours a day, and within 20 minutes a picked man is at your door."

This sounded a bit frightening. "But I didn't know your pump ever got out of order," I protested.

He gave a light laugh. "Well, as a matter of fact, those boys at the station get so few calls that they spend most of their time playing pinochle."

"How does the pump work?"

He whipped out a folder. "This tells the story."

I read it carefully. It began: "Have you ever realized what it means to the housewife to have a steady, WORRYLESS stream of sparkling, clear water constantly at her command. Aquapumpo sees to that, silently, cheerfully, and at a cost of a few pennies a week. The hours you used to spend working a pump handle can now be devoted to the movies, or bridge, or that fascinating latest book."

I handed it back. "Somehow I don't grasp the principle of the thing."

He raised a commanding hand. "The vital feature of the Aquapumpo is the impermeable gasket. The Aquapumpo works by centrifugal regurgitation. Mr. Taylor, I wish I could make you realize the years of patient work that our engineers devoted to developing that impermeable gasket, the millions of dollars that the Aquapumpo spent in order to keep faith with its public . . ."

"How much is it?"

"There's one thing, Mr. Taylor," he said earnestly. "No matter whether or not you get an Aquapumpo, don't get a cheap pump. If you get ours, I'll be 100 percent satisfied; but even if you don't, I'll be 50 percent satisfied if you get a good one. I want above all to see this problem of yours solved right."

I was silent, too moved to speak.

"By the way," he remarked, "it just happens that we have a sales drive on this week, and your order will put me over the top. If you sign today, I can guarantee immediate delivery."

But no, I lusted to hear more salesmanship, so I put him off and sent for Mr. Nibble, of the Jerkwater Pump Guild. I didn't exactly send for him. I happened to open the front door after breakfast, and he was there.

Mr. Nibble too had been thinking about my problem. The Jerkwater pump, it appeared, was made in Colorado, which, as Mr. Nibble pointed out, was a great advantage, since low rents there enabled the Jerkwater Guild to

maintain service stations throughout the country. As for pride of ownership, the Jerkwater people had it to the highest degree. The Jerkwater pump itself was, as Mr. Nibble phrased it, their Ambassador of Good Will.

I asked him how it worked, and he silently handed me a folder. It bore a picture of a golden-haired girl operating the pump while her father and mother, in the middle distance, played billiards. It began: "Can you realize what it means to your wife to have a steady, WORRY-FREE supply of clear, sparkling water instantly at her beck and call?"

I silently handed it back. "How much is it?"

He looked grave. "Mr. Taylor, I want you to promise me that, whatever pump you buy, you won't make the mistake of assuming that the most expensive is necessarily the best. I don't want you to spend a lifetime of regret just for the sake of saying that you have the most expensive pump on the market . . ."

"I'll give you a decision tomorrow," I said.

The afternoon brought Mr. Gobble of the Little Giant Pump Co., Peru, Indiana. He was a shabby young man and was obviously badly frightened. "I heard you might want to buy a pump," he said.

"How about servicing," I demanded.

"I — I don't know."

"Have you any pride of ownership?" I pursued, relentlessly. He seemed staggered. "Well," I continued, "how does it work?"

He timidly held out a folder full of graphs and diagrams. "To tell the truth," he faltered, "this is my first week at selling pumps. I'd better bring over one of the engineers to explain it to you."

"How much is it?"

"Four hundred and twenty-two dollars cash, plus six percent on time."

All evening I pondered my problem. Finally I dispatched three night letters. They ran:

Hubbel Aquapumpo Inc

Sorry have decided to purchase cheap and inferior substitute.

Nibble Jerkwater Pump Guild

Have decided to throw my money away besides don't like children monkeying with my pump.

Gobble Little Giant Pump Co

Wrap it up.

It wasn't a pump, but otherwise this is a true story. I don't know the moral.

The World Needs Me!

Condensed from The North American Review (October, '29)

Whiting Williams

Author of "Mainsprings of Men" and other books on labor problems.

"WULL, it been plain to see," old Evan, the mine repairman, used to say as we cleared the rails of the "fall" of rock and thus permitted the miners to continue loading their cars, "it been plain to see, they cawn't run the bloody mine — nor all the shops and factories oop outside — without you and me!"

That point of view, I am convinced after several years of close-up contact with the world's hardest laborers, is one which every manual or machine worker likes to assume.

What most of us who earn our living with our heads usually miss is this, that the man who works with his hands comes with amazing ease to absorb into himself the great black beast of steel and electricity which we call his machine. By a process altogether natural he combines the machine with himself into a new blood-and-iron creature which he calls familiarly, "WE"! At the touch of a lever the great drop-hammer falls with a world-shaking *Blam!* and in the twinkling of an eye forges the red-hot bar into a crank-shaft. But the man at the lever knows that it is not his machine that makes the world tremble; it is he himself!

So even with him who all day tightens Bolt K-487 on the evolving motor. The feeling that he is a vital part of the organization serves astonishingly to lessen the evils of what appears to the non-manual-minded observer as nothing but soul-wearing repetition.

In modern industry no function exists by itself; nearly always it is as essential to the next job just above as that, in turn, is to the next above it — and so on to the farthest edge of organized work and life.

"Mr. Engineer," whispers the locomotive fireman, "thinks he's the whole thing. But all the same, he couldn't get his engine very blamed far if he didn't get his power (business of tapping chest) from *me!*"

"If I," explains the engineer, "didn't start work on time and feelin' fit-like and ready to go, then those lawyer fellows back there in the parlor car would miss their date with the judge and everybody'd be sore!"

"Of course," says the railway president, "you could have your States without railroads, but they wouldn't be the *United* States!"

The worker in a mine or factory gets the satisfaction of membership in an orchestra of work. In the close-woven chains of associated effort which we call modern industry, each human link, with the help of his sense of mastery over his machine, tends to feel that he is indispensable, and therefore entitled to enjoy the dignity of the entire chain!

"Youse all remember, doncha?" asked a rough, near-down-and-outer anxious to impress his new friends, "that big dam at Shoshone where they changed a desert into hundreds of square miles of A-1 wheat land? Well, I worked on that!"

The leaders of the newer orchestrated industry are only just beginning to get down to the study of those deeper satisfactions which are the real mainspring of individual performance.

The greatest complaint of our working orchestra members is not against their machines, but against the gang-boss and his tendency to "hog" away from them the satisfaction of doing the job so far as possible under their own steam. And all too frequently the gang-boss steals this pleasure from his subordinates only because his own superior has stolen it from him, and so on up.

"When you see workers unhappy in the assembly line," one of my employers used to say, "take a look at the Board of Directors. If you don't find the trouble there take a look at the President. If you don't find it there — take another look."

Many a president believes that nobody except, of course, himself, takes any interest in work except to get from it the maximum of money with a minimum of time and effort. But if he is eager to find out whether even laborers want something beside their pay-envelopes, he need only recall the experience of the foreman who asked a gang of foreign-born to "Dig a hole six feet deep here!", then later, after a glance — "Won't do! Another over there!" and then a third time, "Another! Quick!"

"Deeg here, deeg dere!" his men protested, "all day for not'ing, like dam'fool. We quit!"

Of course, when he explained that he was looking for a broken water pipe, which supplied their companions on the hot rolls inside with drinking water, they went at it again with their: "Sure! Whada hell! Help find-em dam'fool pipe."

So strong is this desire for personal pride in work that sometimes even the best foreman is unable to supply it. The whole industry may be injured by the one great higher-up — the public.

"I like my job fine," said a friend of mine who worked in a glue house. "Glue, you know, is wonderful; it holds the world to-

gether — and I make it. But I'm going to quit it all the same. I just can't stand having people, when I tell them where I work, say 'Oh,' and change the subject as if I were a no-good."

Luckily more and more orchestra leaders share with all their members the craftsmanly thrill they themselves get from their own mastery, not of a single tool or engine, but of their whole coördinated organization of machines and men. Not long ago, for instance, several hundred machinists enjoyed the thrill of shared exploit when, on their own bulletin boards, they saw the pictures of the engine which they had fabricated, while above it stood the proud legend, "How we all helped Lindbergh get to Paris!"

Such sharing in the emotions as well as the motions of the common task will go far, I submit, to create that mutual respect and understanding which underlies all coöperation. Trust such mutual respect to discover and develop an interest in the quality of its output rather than merely its quantity! Trust it also to continue the spread of employe ownership and all the other steps toward lessening the old gap between capital and labor, master and man, boss and bossed.

Similarly, this kind of sharing is sure, I believe, to bring about a successful effort by the whole great team of industrial society to free itself of the great blot now soiling it — I mean irregularity of work. And finally such sharing will make it easier for every worker to find in industry the assurance of his value among his fellows because it will encourage more leaders to mix in along with the blame for him who lets his work-mates down, the nod of recognition for everyone who, at his lathe or throttle, adds his proper share to the aggregate dignity and credit of the whole.

It was old Evan, the repairman, who made me optimistic about our ability to master the whole vast tool we have created, once we fully understand it. A manager had just complimented him on a certain job.

"Fer a kindly word," said Evan to me, "a mon will work 'is bloody guts out! Awnd every mon o' feelin' and sensibility do know that the w'ip o' the tongue and the lash o' the lip been worse fer 'im thon any dawg. Every mon moost 'ave a chawnce 'ere on the job to show himself a mon!"

Plant "Pills" Grow Bumper Crops

Condensed from Popular Science Monthly (October, '29)

H. H. Dunn

EMANCIPATION of farmers and growers of fruits and flowers from the vagaries of soil, season, and climate is promised by a discovery, of revolutionary importance in crop production, announced by the department of plant physiology of the University of California. Through the use of a chemical "plant pill," administered to plants grown in shallow tanks of water, cereal and vegetable crops now are made to thrive under desert conditions of heat, arid soil, and lack of humidity.

Production of wheat, barley, rice, and cotton is increased from 25 to 50 percent. Beets, carrots, turnips, and other root crops are speeded to full development 20 to 30 days ahead of normal, their size augmented by 60 percent, without loss of tenderness. Tomatoes, grown by the new method alongside those cared for in the standard manner, show quantity increases of as high as 40 percent, with larger and heavier fruits.

Full blown roses are produced in 65 to 80 days in normal house temperature in midwinter. Pansies four and five inches in diameter are common. Sweet peas five feet high and laden with blossoms are brought to bloom from seed in 60 to 70 days, and in some instances much less.

Fully 5000 experiments over a period of five years have resulted in this discovery, which Dr. W. F. Gericke, head of the department of plant physiology, calls "the greatest gift to agriculture since the science of fertilization of soils was worked out." In this opinion he is supported by the College of Agriculture at the University, and by scores of plant and soil experts.

In brief, the secret of this new method of speeding plant development consists in administering combination doses of the seven elements of plant food, in the exact quantity and quality required by each different form of vegetable growth. These elements, combined in capsules, are dissolved in the soil or water where the plants are to grow. Bound together in a short tube by means of composition somewhat similar to plaster of Paris, the chemical combination contains nitrogen, phosphorous, magnesia, iron, potassium, sulphur, and calcium.

Each variety of tree, cereal, vegetable, or flowering plant de-

mands a different coördination of some or all of these seven elements. But experiments revealed that the chemical combinations could be cut down to about a score, each one being best adapted to a certain group of plants.

The discovery was then applied to commercial flower growing. Roses, pansies, sweet peas, dahlias, and other flowers were produced in quantities during December and January by florists working under Dr. Gericke's direction. Cost of this midwinter production of summer flowers was no greater than production by ordinary methods in the warmer season.

The best medium in which to use the "plant pill" is water, though it has also been successfully applied in soil. The size of asparagus stalks was increased nearly 100 percent, without impairing tenderness or decreasing the number of stalks to the hill. Potatoes were increased in size by half, without enlarging the plant or altering the average number of tubers to the hill.

This crop development was in soil. Further experiments showed that if the food plants were grown in water, instead of earth, the rate of growth was nearly doubled, the size of each vegetable increased, and many more of each vegetable could be grown on the same area. Cotton was brought to bearing of full bolls in 90 days. Wheat grown in water with the plant pill made twice the growth of the same variety in water with the best commercial fertilizer, and more than 50 percent greater growth than when planted in soil with the plant-pill solution.

From these results, Dr. Gericke and his assistants, with the backing of the University, started experiments with tank production of food crops, to determine costs of such production on a commercial scale. They found that a shallow concrete tank, covered with tarred paper, or with heavily galvanized wire netting of small mesh, over which burlap is laid, formed the best medium for the commercial production of vegetables and cereals. Seedling plants are set out in apertures close together, with their roots reaching the water in which has been suspended a number of the "pills." Separate jars are good for home use.

Going into costs, Dr. Gericke found that an acre of level land can be covered with concrete tankage, six to eight inches deep, divided into sections and laid flat on the surface of the earth, for a maximum of $250 — which is about three times the expenditure necessary to place such a tract in good condition each year for vegetable growing in the usual way. But once the tankage has been constructed, its life is

about 50 years. No cultivation, irrigation, thinning, or weeding is necessary, beyond filling the tank with water and placing the new composition in it. The speed of growth tends to shut out insect pests, as does the separation of plants from soil.

Careful calculations, based on actual experiments with these tanks, indicate that in two or three seasons the vegetable grower would repay himself, from the extra production, for the original outlay for tankage. Cost of the "pills" for large area fertilization will run about one-half of that of the best commercial soil fertilizers.

Climate, absence or presence of humidity, richness or poverty of soil — none of these formerly vital factors in agriculture, seems to affect results so far achieved by the Gericke discovery. Thus Dr. Gericke produced, in controlled areas, conditions of heat and aridity similar to those of the desert sections of Arizona, New Mexico, and southeastern California. On these miniature deserts, he set up tanks, in which were planted radishes, turnips, beets, lettuce, spinach, chard, tomatoes, egg plants, and other food crops. It was found that, compared with 5000 tomato plants — a heavy cropping from one acre of soil — more than 20,000 plants of equal size and strength could be produced in one acre of tanks.

Dr. Gericke foresees the application of the tank principle of food production to the arid regions of the world. "A few gallons of water," he says, "thinly covering the bottom of a cheap tank, can be made to produce food in abundance, in the midst of the most barren desert. Few sections of the American desert have no rainfall, and on almost all sections artesian wells can be brought into flowing at comparatively shallow depths. One rainfall, properly caught and conserved, will supply enough water for a number of tanks for a year. The output of a small well, insufficient to irrigate one acre of soil, would provide an abundance of water for ten acres of tanks."

In his vision of the future, the plant physiologist foresees every desert spring surrounded with shallow tanks, each producing plants in numbers sufficient to feed large populations. He declares that the tank system will eventually replace the "furrowed field" as a source of the food for large centers of population. With it, for instance, even the roof of a skyscraper could be profitably turned into a garden, and the man with a city lot would add materially to the family income by the use of only a small part of his land.

The Talk of the Town

Excerpts from The New Yorker

WITH the explorers leaving no ice-floe unturned, it becomes increasingly difficult for us stay-at-homes to maintain the Santa Claus legend. In the presence of our highly literate nephew the other day, we made some furtive references to the North Pole and St. Nicholas. "It's very funny," he said, deprecatingly, "that David Putnam has been up there and yet there's no mention of Santa Claus in his book!"

A patient landlady in the Beekman Place district who had just attended to a broken drain pipe for one occupant, then examined a cracked ceiling for another, and listened to a third's tirade about a cheerless radiator, was called from her chilled supper by a fourth complainant. This was a flushed woman of nervous temperament who was obviously the victim of some heinous mismanagement. The landlady was prepared for the news that a wall had collapsed when the tenant burst out with her grievance.

"I want you to know," she said, "that I was kept awake last night by a cricket."

The time spent by pedestrians waiting to cross Fifth Avenue at Forty-second Street totals a hundred thousand days a year, and is unimportant. To suppose that it matters is characteristic of this day, this manner of thought. We will not regard it as important until someone tells us what these waiting pedestrians would have been doing had they not been champing there at the brink of Fifth Avenue. What would have happened, eventually, in those two minutes which each says he lost? Tell us that. In the civilized and intelligent city of our dreams, time will only be forgotten, never lost. We look toward the day when people will drop time for the hot potato it is. The new Ford goes faster than the old. What pupil thinks that will save anybody a single moment of living?

The men who pass out papers at the out-of-town newspaper stand at Times Square are psychologists of no mean ability and aids to the social order. It is a part of the police psychology that if a murderer cannot return to the scene of his crime he will do the next best thing to get in touch with that scene. The absconding bank cashier rushes for the home-town paper to find out what the board of directors did when they

discovered his shortage. The news salesman has his tip from the detective department and the rest is easy.

Quite frequently a young lady will make her way to the stand and ask for the paper from Ashtabula or Tampa. The dealer, with quick recourse to his card-indexed memory, will inform her that it has not arrived but that if she will return in half an hour he will save it for her. Back she comes to find a detective who frequently convinces her that she isn't on her way to fortune and that perhaps she ought to go home and see the family.

Not long ago the slender, tall gentleman with the mole on his left cheek, and the sly, rather furtive blonde, who asked for the Smithville paper, turned out to be the factory cashier and the choir singer whose disappearance was shockingly chronicled in the paper they had just bought.

Of course, they are in a minority. There are hundreds who pay their visits to the stand for no other reason than an honest homesickness and a desire to see what the Ladies' Aid did at its last meeting and whether it is duly chronicled that they are visiting in New York.

An insurance salesman recently told us that he is able to make difficult sales because the average man secretly believes he can argue the hide off any salesman, and likes to hear himself try. Once he starts arguing, he hangs himself.

The cardinal principle for insulating oneself against insurance is this: always make the wrong answer to the salesman's questions, which are all scientifically designed to bring forth the answer Yes. Your salvation lies in saying No. He will start off very candidly with some such disarming question as this:

"Now, Mr. Fish, as you know I have come to see you about insurance. I assume, sir, that a man of your business integrity has already made provision against unforeseen circumstances, *haven't you?*" (You say Yes.) "Just as a matter of sound business sense you have created an estate for the protection of your wife, *haven't you?*" (You say Yes.) "Furthermore, I assume that you may wish your son Roger to enjoy the educational advantages in life that he deserves, *don't you?*" (Yes.)

Well, if you say Yes to all these questions you are a goner, because he has a whole string of others calling for affirmative answers which lead inevitably to the execution of a policy. The only safe answer, as we said, is No. If you say No he will still go on trying to sell you insurance, but he will be too stunned and dazed to accomplish anything.

A good variation is to say

when the salesman refers to your wife: "I left my wife last week." When he speaks of your son, say that unfortunately your marriage was childless.

Last Saturday night two gentlemen were standing in line at the "Vanities" box office when a pretty young woman came up and asked one of the men if he wanted two good seats. She said she had two in the third row, but found she could not stay through the performance, because she had a sick child at home. She held up the stubs of two tickets. Suspecting some sort of razzle-dazzle, the wiser of the two men said he would buy the seats at their box-office value, if the doorman said the checks were all right. This the doorman did say, and the gentleman paid the lady $15.40 for the ticket-ends. When the two men went down the aisle, their worst fears were confirmed, for in one of the appointed places sat a soft, happy, fat man. Asked by the usher for his seat check, he explained that his companion had them and had gone out to phone, but would be back soon. The news was then broken to him as gently as possible that his fair companion would never come back and that she had resold the tickets he had purchased. Uttering loud protests against women and theaters, the unfortunate fellow finally gave up his seat. This means that you should either hold on to your seat checks or your companion's wrist.

The parents of a solemn boy of New Canaan, Conn., are perturbed over his spirit of disenchantment and resignation to the worst. They were sending him off to relatives on a visit and told him to write his name and address on a card and keep it in his pocket. The youngster did so, beginning: "In case of accident this was Emery H. Busny."

When our little dog Daisy seemed poorly last week, we took her down to the Ellin Prince Speyer Hospital to get some professional advice on cod-liver oil. The visit was a disarming experience; it gave us a renewed sense of the benevolence of humanity as well as the dignity of animals. The reception room, white and sterile; the reception lady, starched and kindly; the other patients, soft-eyed and wet-nosed; the phone calls, "He has no temperature today!" were all part of a strong impression that this was the nicest place in New York. And when our turn came, and we ushered Daisy into the examination room and were greeted by a doctor who wore gray spats, it was too much happiness. Even Daisy was impressed, and took a turn for the better.

Canada Is a Foreign Country

Condensed from The Nation's Business (September, '29)

Floyd S. Chalmers
Editor, The Financial Post, Toronto

AMERICANS ask me regularly, "Why did Canada reject the Reciprocity Pact in 1911?" The smart rejoinder to that question is, "Why did the United States found the League of Nations and then refuse to join it?" For a set of political developments quite suggestive of President Wilson's troubles with a hostile Senate majority entered into Canada's rejection of reciprocity after its long and friendly negotiations to obtain it.

"Champ" Clark, then Democratic leader in the House of Representatives, burst forth with this statement: "I am for reciprocity because I hope to see the day when the American flag will float over every square foot of the British North American possessions, clear to the North Pole. That is the way things are tending now."

There was an election in Canada shortly after that and the chief issue was increased trade relations between Canada and the United States. Mr. Clark's remark was just the ammunition that the opposition party in Canada, which was fighting reciprocity, required. It smeared that statement over every billboard in Canada. A prowling tiger decorated the billboards and its stripes spelled "annexation." Reciprocity went down with the government of the day and Mr. Clark helped in the defeat, for he had misjudged Canada.

Americans constantly make just as serious blunders in their relations with Canada. Canadians love "Lindy" and gave him a great reception on his one visit to the Dominion. But they become warmly resentful when he is referred to as the first man to fly the Atlantic. Canadians are intensely proud of the fact that the first persons to fly the Atlantic were two Britishers and that they made the trip eight years before Lindy.

Canadians nursing the sprains of their own July 1 national holiday only know of the existence of the Fourth of July from visiting American tourists. Yet every year some American advertiser puts out a Fourth of July advertisement in Canadian publications headed "A Declaration of Independence."

Canadians celebrate their Thanksgiving day early in November and do not eat turkey

again until Christmas. But American advertisers very often use the turkey motif in Canadian papers toward the end of November.

"Are Canadians unfriendly to Americans?" I was asked the other day. I really do not know how one could get that impression when it is known that Canada is the largest customer of Uncle Sam; that we read millions of American magazines every year; that we dangle metaphorically in the arms of American screen actresses; that we welcome the newest American ideas in luncheon clubs, automobiles and stage plays; equip our homes with American refrigerators; listen to American radio programs; follow the victories of American baseball teams, and stay up nights to hear who has been elected President.

No, Canadians are not unfriendly. Most Canadians are like most Americans. But American influences are not dominant in Canada, and it is in failing to recognize this that so many American business houses fall down. More than half of the population of Canada comes from British stock. A quarter of it comes from French stock. There are three times as many people in Canada who were born in the British Isles as were born in the United States.

Canada is not English; it is not American; it is not French. It is Canadian and the Canadian individuality combines qualities drawn from Britain, France and the United States.

Canadians are proud of their inheritances from Britain. They are boastful that they adopt the British practice of hanging murderers instead of starring them in stage plays. They rejoice in their parliamentary system which had its origin in British practice. Canadians speak as proudly of Magna Charta as the American does of the Declaration of Independence. Canadians revere Westminster Abbey as the New Englander reveres Plymouth Rock. For Canada, the war began in 1914 and not in 1917.

Canadians wear British woolens even though they may cut them in the style of Broadway actors. They enjoy American breakfast foods but they are likely to finish the first meal of the day with a cup of tea in the English style. They will hum the latest Broadway hit but crowd the theaters to see an English light opera company. They know who is President of the United States but they know also who is prime minister of Britain. Canadians like Virginia tobacco but want it made up into English type cigarettes.

The Canadian loves Uncle Sam but watches him "keerfully," and he magnifies the importance of the slightest tendency to "spreadeagleism." He will buy something because it is English and his wife will buy something because it is French, but neither will buy anything simply because it is American.

To put it as bluntly as briefly, the Canadian consumer prefers the American to consider him a foreign buyer rather than as one of the home market.

The Need for Loose-Leaf Minds

Condensed from The Virginia Quarterly Review (October, '29)

Raymond B. Fosdick

New York Lawyer, Author of "The Old Savage in the New Civilization," etc.

A PLAN of incalculable consequence, made possible through the gift of six million dollars by the International Education Board, is to construct a 200-inch telescope in California. When built, this instrument will penetrate twice as far into space as the largest telescope we now possess. With our present instruments we have detected objects so far away in space and time that light, traveling at the rate of 186,000 miles a second, takes 140 million years to come from them to us. What new conceptions of time and space shall we gain when we are able to reach out twice as far into the universe?

Religious and secular journals alike have spoken with enthusiasm of this new instrument that will search out the secrets of space and widen the horizons of human understanding. The instinctively hostile attitude of our forefathers to anything that might disturb their settled patterns of thought seems, at first glance, to have given way to a tolerance which is quite new in the history of the world.

It was less than 200 years ago that Newton was pilloried from the pulpits as a "dangerous man" whose hypotheses were "delusive and arbitrary and contrary to Scripture." It is within the memory of people now living that Darwin's books in 1859 and 1871 were met with a torrent of abuse and misrepresentation almost without parallel. It seems a far cry to the days when Dr. James Simpson, a Scotch physician, was vilified from Protestant and Catholic pulpits because he advocated the use of anesthetics in obstetrical cases; and yet this occurred in the days of our grandfathers. It seems long ago that Herbert Spencer and Thomas Huxley were banned in American college libraries; and yet this occurred in the days of our fathers. It is difficult to believe that measures for the control of yellow fever were savagely fought in America and elsewhere because they "interfered with God's righteous judgments on the sins of the people"; and yet this occurred in our time. The scarlet-clad cardinals of the Church before whom Galileo stood to plead his cause, failed to understand his startling thesis that, contrary to the Scriptures, this earth which God had so

peculiarly made his own was not the center of the solar system, but that with other planets it revolved about the sun.

Yet Copernicus and Galileo and Newton never dreamed in terms of our modern astronomy. The earth might revolve about the sun, but the sun was still the center of the universe. Instead of a world 6000 years old, spontaneously created, we now have a planet that is probably 2000 million years old, evolving through leisurely immensities of time out of a universe of distances in which our particular solar system is contemptibly insignificant. We are traveling through space on "a dwarf planet revolving around a dwarf star."

We have entered an age that is thirsty for knowledge. Today, when Einstein announces his revolutionary theory, the leading journals all over the world give columns of space to it. Everywhere Einstein is hailed as a genius working on the far frontiers of human knowledge.

It is when science begins to turn questioning eyes upon things that are related to our daily living and thinking that tolerance seems suddenly to desert us. With scarcely the change of a word the invectives and arguments employed by Martin Luther against Copernicus, by John Wesley against Newton, by Bishop Wilberforce against Darwin, are used today against those who propose innovation or experiment in our social institutions.

Whatever the cause, intolerance of new ideas is still firmly rooted in the human mind. Our easy optimism arising from the victory of the natural sciences and the spread of the scientific method is soon dispelled as we see the old battle line still intact — traditionalism and prejudice in full array against new beliefs and new inquiries and new solutions for old evils. It is one thing to question the validity of Newton's law of gravitation; it seems to be quite another thing to question the Constitution of the United States or the theory of democracy. Not long ago two teachers in West Chester, Pa., were dismissed because they sponsored a liberal club that was opposed by the local chapter of the American Legion. The purpose of this club was to ask questions about property and capitalism and international relations — just as the chemists and physicists are asking questions about all sorts of accepted principles which the past has handed down. Apparently a man is either a scientist or a dangerous radical, dependent upon the material with which he works. If his theories have to do with the relations of the atoms, he is a scholar; if they have to do with the relations of human beings, he

is doubtless a Bolshevik who ought to be watched.

We are living in an age when the authority of tradition is being superseded by pragmatic test. All things, old and new, must be put on their merits. No longer are there any domains of thought or experience or emotion over whose entrances a "Keep Out" sign can be maintained against the inquisitive and questioning spirit. A university, for example, should create an atmosphere in which a Galileo or a Darwin would feel at home; in which a Karl Marx or a Lenin or a Judge Lindsey would be welcomed for any contribution he might make to our advancing knowledge.

It must be admitted that tolerance is not an easy virtue to achieve. Our beliefs are generally group beliefs, and we like to think with the herd. Yet on no subject has the last word been said. Just as some encyclopedias are put together on the loose-leaf principle in order that fresh pages can be inserted as more extensive information is acquired, so today is there a need for loose-leaf minds, from which old ideas can be taken out and thrown away as new ideas are discovered.

Here, indeed, is a call for tolerance. For it has been the inextinguishable conviction of every generation that however many erroneous ideas may have previously been held, at last, in its own day, truth has been finally reached. Nothing has been more pathetic in human history than the arrogant dogmatism with which each generation has proclaimed its discovery of the truth. In theology, Calvin laid down the final word in his day; a century later Cotton Mather modified it; a generation later Jonathan Edwards gave it an entirely new setting; while modern theologians have altered the entire structure. In philosophy one dogmatism has succeeded another for nearly 3000 years. In the field of law, the belief of each generation in its own concept of justice has reached supreme heights of pathos and absurdity. Natural science shows no better record. I remember a college professor telling his class that in chemistry and physics there was little discovery left for the future. Yet scientists have recently opened up vistas so far ahead that we now think of physics and chemistry as merely in their infancy.

The new knowledge has surely sounded the doom of dogmatism. The old certitudes are losing ground. And when we stop to think of it, this demand on us for loose-leaf minds is not a presumptuous challenge to the integrity and dignity of the race. For as time runs in our planetary history it was only a few minutes ago that man began to think at

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Now It Can Be Told

Condensed from Liberty (September 21, '29)

Richard Carroll

THERE is profound merit in the claim of the British counterespionage service that it did most to win the war. It seems that back in 1910 the German emperor made one of his frequent visits to London. As usual, he was carefully guarded from harm by Scotland Yard detectives who watched the royal palace. One evening a high German official furtively left the imperial quarters and set out alone on a journey. Scotland Yard men, wondering why the official chose to go alone, and why he should go in the direction he did, followed him.

The German proceeded to an out-of-the-way place in the northern part of the city and disappeared into a barber shop operated by one M. Ernst: a lowly establishment and not one likely to be patronized by such a personage as the German official. To make matters more interesting, the visitor was recognized as the Chief of the Intelligence Service of the German Admiralty!

Scotland Yard immediately set about learning the history and activities of the barber. He was a German, born in England. Letters directed to his shop were read secretly, and from them it was discovered that the barber shop was the clearing-house for mail sent from Berlin to be delivered to the German spies in Great Britain.

The British kept the discovery to themselves. The German agents were not arrested, but were suffered to send and receive messages as usual through M. Ernst. All correspondence was read by British agents before the Germans at the other end were permitted to see it. And the most astounding aspect of the whole affair was that Berlin had not the slightest knowledge of what was going on. Thus the remarkable picture presented itself of Britain keeping watch on the entire network of German espionage in England for four years without any inkling of that fact leaking out to the Germans.

Not until war was declared on August 4, 1914, did England make any move. Then 21 of the 22 German spies operating in England were arrested and clapped into jail. One managed to escape.

On the declaration of war, Germany, looking to her spies in England for information on English troop and naval movements,

found all her sources of news dried up, her agents in jail, and herself in the dark. As a result, the first British expeditionary forces got across into France, British supplies went to their vital destinations, and guns, food, and ammunition were moved without the knowledge of the enemy.

What would have happened had the German High Command known what the British were planning, and thus planned countermovements, can only remain a matter for guesswork.

The Need for Loose-Leaf Minds

(Continued from page 631)

all. We are just around the corner from savagery. How can we, in this early stage of our development, seriously imagine that with our little inductive and deductive tools we have succeeded in carving out any substantial segment of ultimate truth about either ourselves or this vast universe in which we are adrift?

As one sees man fighting for his life with the early mammals, struggling for survival through the ice ages, pitting his slowly developing brain against Nature's recurring hazards, shocked into new modes of existence by the discovery of new weapons, tirelessly building his little systems of philosophy in an attempt to explain himself and the universe he lives in — surely no one can say that this strange and indomitable creature is going down in defeat before the flood of new knowledge that in this generation has been poured across the world. It is only another one of Nature's hazards. The same tenacious courage and the same rough adaptability that have saved him a thousand times in the past will save him again.

Man has determinedly set out to learn the secrets of the universe — whether they are hidden in himself, in the tiniest atom, or in the immense reaches of space. Finality will forever elude him. And yet it is through knowledge — and still more knowledge — that man will win, not peace but perspective, not certainty but tolerance. And it is through tolerance that he will find, not repose, but an enlarging vision.

Forest Folk

Condensed from Good Housekeeping (October, '29)

H. L. Dillaway
A Forest Ranger

WE call animals wild, without realizing that man himself has made them so. In our national parks the observer can still catch glimpses of the typical life which animals in this country used to lead. There, in their native haunts and unmolested, the animals become used to the presence of man and actually seem to enjoy association with him. Wild grouse strut about like farmyard poultry; bears pay friendly visits to campers' tents; mountain sheep and goats descend to watch passing autos; elk bugle in the thickets, and moose bury their great muzzles among the lily-pads and set canoes dancing on the ripples; squirrels, woodchucks, rabbits, and wild birds constantly flirt around you.

So peaceful and amiable a place sounds safe enough, but it is well to remember that wild animals cannot be wholly trusted. They are as temperamental and individual in their actions as people, and the results are sometimes disastrous. Moreover, animals that are somewhat used to human beings are particularly dangerous. A "tame" buck, a family pet, turned on his mistress and nearly gored her to death. And I know of a woman who one day suddenly met a tame bear. Paralyzed with fear, she stood still and shrieked, and the bear, wanting the right of way on the trail, brushed her aside with his great paw. The blow broke her hip.

I have watched hundreds of bears at all seasons, and they do many odd things to pass the time away. The younger ones like to stand on their hind legs and box with each other. An almost sure trick to make a bear stand on his hind legs is to crack a dead limb over your knee. The bear rises almost instantly to look about. Bears are always on the lookout for each other; the small ones give the larger ones a wide berth.

I have witnessed many quarrels between full-grown bears. Most of the fighting is strutting about and bluffing, showing the teeth and ruffing the hair along the spine. They usually settle their differences without a blow, though the cubs are always slatting each other about.

In emergencies I have sometimes had to use the old trick of "rushing" an animal, and the

trick is a good one to remember, for in wild-game country — especially in the rutting season — wild and semi-wild animals may attack at any time. The trick is to wave a jacket about your head in circles, yell your loudest, and charge the animal. Cowboys and guides stop charging bears and wild steers this way. Once, rounding a curve in thick woods, I saw a boy racing toward me with a black bear chasing him. It was no time for mock heroics. I had my jacket off in an instant, swung it wildly, and with the mightiest of yells bore down on the bear. Did it work? That bear's hind legs passed his ears in his frantic efforts to escape!

Bears are large and bulky, and they look clumsy. But they are quick enough to stop a squirrel, a mouse, or a gopher with a paw movement so swift that the eye can scarcely follow it. A bear can easily outdistance a human. I once had a splendid chance to race a bear along parallel woodland trails. Although we started together, I was soon left far behind.

Grizzlies like to keep to themselves and are rarely found with brown and black bears except in good feeding grounds. A dead whale, a number of winter-killed elk, or masses of salmon ascending a stream will collect bears of all species. So long as the supply of food is sufficient for them all, they get along together harmoniously.

When bears hibernate for the winter, their dens are seldom located below 5000 feet; from that level to 10,000 feet is the usual height. For several days before "denning up" the bears do not eat, and their stomachs close up like hard, deflated rubber balls. The young are born during the hibernating period. At birth they are about the size of squirrels and are blind. When spring comes, the bears emerge with brand-new claws and footpads. A little water is the first thing they take, and they do not eat for several days. They like to lie about on rocky ledges in the sunshine.

Most bears are vegetarians. They like roots, grasses, lily bulbs, berries and fruit, acorns and nuts. When bears eat honey, they include the bees and grubs. Apparently the stinging does not bother them. The diet is varied with a dead bird or two and sour ants routed from their nests. A turned-over log offers mice, beetles, chipmunks, gophers, or squirrels — a good feast. To get at a marmot, a bear will dig through half a ton of rocks and earth. Sometimes a grizzly develops a taste for mutton, or beef, and becomes a killer. The habit spreads, one grizzly teaching another. Blacks and browns are less likely to kill for food, al-

though the latter may become pork eaters and visit farmers' pigsties.

I have proved to myself times without number that bears do not have good eyesight. I question seriously whether bears can see at a distance at all. Close up, however, they see microscopically. And what they lack in sight is made up in the senses of smell and hearing. They can readily smell odors miles away when the wind is blowing fresh and strong. I know actual instances of bears scenting carrion at a measured distance of 25 miles. Their sense of hearing is also very acute.

Those unfamiliar with wild life may be surprised to know that accidents are not infrequent among animals. Falling trees and broken branches maim or kill; lightning exacts a heavy toll, not from the bolt itself, but from the fire it spreads. With the spring thaws come avalanches, which always catch a certain number. Winds and tornadoes are also a menace, and in one instance I saw a number of elk trapped and killed outright by a fall of trees.

Wild game is supposed to be too sure-footed to be injured by falling, but this is not always the case. Two men, paddling along the edge of a lake close to shore, saw a mountain goat feeding on the steep hillside above them. It was summer, and there was, of course, no snow or ice. Suddenly the goat slipped and fell; he partly recovered himself, only to go end over end down the mountain. As he did not rise and run off, the men went ashore to investigate. They found the goat caught between two logs, his four feet in the air. After taking his picture, the men pulled him out and set him on his feet.

There is another story of a big bull moose with a broken leg. A rancher on an Oregon farm saw him standing near the cabin one morning, and was able to approach him and examine the broken hind leg. Later he called the game warden and the veterinary. All the while the leg was being placed in a cast the moose was gentle. He remained in his stall until the leg was healed; but on the day he was to be released the back-firing of an automobile frightened him and he slipped and fell, breaking the leg again in a different place. The work had to be done all over again, but eventually the moose was released. Weeks later, when the man was fishing on the lake he saw a moose on the shore, sniffing the breeze. Then the moose entered the water and swam to the boat. Recognizing his patient, the man scratched the moose's neck; then the big fellow turned with a contented grunt and swam ashore. Only a week later the same incident occurred again.

The Brown-Skin Fad

Condensed from Plain Talk (October, '29)

Eugene Gordon
(A Negro)

"ONLY the tanned can wear the smartest color, white," according to a recent fashion note. A few years ago a tanned person was laughed at when she dressed in white. She looked like a fly in a pan of milk, unkind humorists said.

Now, fashionable modistes use dark-brown wood and bronze in their shop windows. Brown-skinned faces have come to set off the most expensive creations, and to set them off with an *éclat* so superior to the ordinary that hosts of buyers are certain that to look well in their finery they must be brown. What has become of peaches-and-cream as a standard of facial chromatics? Is the brown-skinned gal finally coming into her own?

Today every large department store gives a leading place in its cosmetic display to Afric-tinted powders, creams, and lotions. Each beauty specialist proclaims some new method of niggerizing the nordics — a sousing of this new tan polish, for instance, followed by a dusting of this tan powder, will fit the candidate for synthetic Negrohood to wear becomingly the various "sun-back" sweaters, bareleg stockings, glowing suntan pearls, jagged coral and exotic wooden beads which are now the fashion.

So eager have become the high-toned society matrons to resemble their high-brown scullery maids that many of the ladies, I am told, actually pay the girls flattering sums for the secrets the white folk suspect the colored folks possess. They forget that these brown-skinned servitors have been struggling for years to throw off what had become a curse upon them.

In a Boston department store not long since a young woman I know found herself concentrated upon by a battery of blue, hazel, grey, and green eyes belonging to customers of varying shades of suntan complexion. She was becoming self-conscious when one of the bolder of the scrutinizers approached her. "Pardon me, madam," she said, "but would you mind telling me what brand of makeup you use?"

The suntanned one replied: "I don't think *you* could achieve my kind of makeup. You see, God gave it to me." She was a colored society belle.

Theaters and shoppes (says the Washington *Eagle*, an Aframerican newssheet) are expe-

riencing difficulty in determining from the makeup the exact degree of deference to bestow upon the once fair ladies. As a result many brown-skinned ladies, who have been sunkissed for years, are being overwhelmed with courtesies and kindnesses by shopwomen and shopkeepers, while the ban seems to be temporarily lifted as far as the shows and restaurants are concerned.

The *Eagle* adds:

It is said that one store posted on its bulletin board a reminder that "Some of our most valued customers are returning from the Southland deeply tanned, so watch your manners."

Many fashion magazines have depicted on their covers the faces of men and women who could hardly pass muster at some swell Aframerican social affairs. A recent *Vogue* contains four colored drawings of girls. Their complexion is unmistakably a chocolate brown. They are the kind of drawings that colored folk have been accustomed for years to seeing in their own periodicals. Moreover, these pictures show another departure from the peaches-and-cream standard. The lips of these lasses are far too generous in their contours to be those of undiluted nordic maidens.

Yet, three years ago, when the *Survey Graphic* issued its famous Harlem number, devoted wholly to Aframericans and having for its cover a fine drawing, in black and white, of Roland Hayes, the publication was refused a place on a Washington, D. C., hotel news stand. The management could not tolerate the representation of a brown face among white.

The women of black and of white America, through the process of struggling to look like each other, are reaching a common plane of complexion. The white sister makes herself over to resemble a typical high brown, and the black sister strives mightily to acquire whiteness of skin and glossiness of hair. Is it to be wondered at that shopkeepers and head waiters and modistes are issuing orders to treat all women with decency, temporarily at least?

To the fashionable, a brown skin is now a badge of distinction, like the bizarre tags that travelers paste on their luggage. It is not necessarily a trustworthy badge. Most of it is counterfeit. It is the counterfeit that I have been discussing. It is an imitation of the tan that comes naturally only to one who lives out of doors. An outdoor life, except for the farmer's or the rancher's woman, is possible only for the lady of leisure. The chief reason, then, for the brown-skin fad among the masses of palefaces is that it gives them the deceptive appearance of having wintered, like the rich idlers whom they worship, on the sands of Palm Beach.

Can You Loaf?

Condensed from Hearst's International-Cosmopolitan (October, '29)

Bruce Barton
Author of "The Man Nobody Knows," etc.

COMING down from Boston, I made a census of the 32 passengers in one chair car. It was as follows:

Asleep (in various awkward positions)	13
At work (earnest-looking men with brief cases)	2
Looking straight ahead with bored expression	6
Reading fiction	5
Reading serious book	1
Doing cross-word puzzles	2
Playing solitaire	1
Applying lip-stick	2

Thirty-two Americans, each with five hours on his hands, and almost all of them bored. Here is another picture:

"I retired from business two years ago," said a middle-aged man. "All my life I had been planning that when my daughter was married and I had a sure income, I would retire. So, at 52, I sold my business and went to Europe. The wife enjoyed it. So did I, for a while. Then the other Americans began to come home, and we were lonesome. So we came home and went to Florida.

"You must remember that I had planned to retire for a long time. I was well equipped for the easy life. I enjoyed riding and swimming and golf. I fished and hunted and played a fair game of bridge. It looked safe enough, and you'll probably think I'm crazy when I tell you what happened.

"I began waking up with a terrible thought: 'Gosh, now I've got to get out to that first tee and plug around that same old golf course all day.' It was worse than going to work. It went on like that till, one day, I couldn't stand it any longer. Do you know, I've taken another job now. Salary not half what I used to make, but I didn't care."

As an advertising man I go around among all sorts of industries, and everywhere I see more leisure. A factory that used to make a certain number of articles with a thousand workers is now making ten times that number with no more workers, and at shorter hours. Modern machinery isn't the only thing that has brought on this trouble. Education has intensified it. A trained mind inevitably does more and does it more quickly.

Then, to make matters worse, along come the doctors to double our lives. In Shakespeare's time a man of 40 was all washed up and ready to call it a day. He had lived. Montaigne retired to his tower at 38. Napoleon conquered

Europe at 30, and died at 52. They moved fast, and passed out young.

Today, we old codgers of 40 are just beginning to go strong, and the average age of presidents and chairmen of boards is around 65. By hanging on the way we do, each of us is the equivalent of two men of the olden times.

What's going to become of us all? How can we endure living when we don't have to spend all our time making a living? What shall be done to combat this new disease of Leisure? Obviously the question is big; but let me submit three suggestions:

1. Quite a bit of leisure could be used up if we were ever courteous to one another.

We are all so foolishly and inexcusably rude. We ride all day in a Pullman car, and when the train draws near the station we jump out of our seats and push and jostle in the narrow corridor. Why must we trample on each other's toes and poke each other in the ribs and exchange black looks? Only five minutes at the most is at stake.

The same sort of thing happens on the road. In and out of the line of cars we dodge, straining our nerves and endangering our lives to be a jump ahead. We lift the telephone receiver, and if Central does not answer on the instant we grow apoplectic. I know men who travel a great deal and who start almost every morning with a restaurant battle because the waiter serves someone else more promptly. I have seen a woman nearly decapitated in trying to leap ahead of another woman into a revolving door.

We jam into a street car as if it were the last car that would ever run. We dive for an elevator to save one-tenth of a minute in getting to our desks, and then waste 20 minutes telling stories. At the golf course, where we have gone for recreation and to relax, we ruin our digestion with quick lunches, and tear the buttons off our clothes in the locker room. Why? Just to beat the other members to the first tee.

"Good manners require a great deal of time," said Emerson.

2. Leisure would hurt much less if we weren't so terribly afraid of being alone. Away from a crowd we itch. As for being marooned, that is beyond endurance!

> I hope in hell their souls may dwell
> Who first invented Essex Junction.

What's the matter with Essex Junction? Nothing, except that we don't know how to use it. There are other stranded passengers, each of whom must have had interesting experiences. There are books. There are trees that have looked down upon the petty busyness of humanity for generations. There is a bench in the sunshine where one may dream.

3. We might each adopt a hobby which would have some relation to the happiness of other people.

I have a pet college in the Kentucky mountains. A long time was consumed in hunting it out and adopting it. I wanted to find the place where one dollar was made to do more work than anywhere else in the United States. At this college the students get their meals for 11 cents each, and their rooms, including electricity and running water, for 60 cents a week. Some kids are there at my expense. I go down each year to talk with them, and ride horseback. Never for a moment do I feel that these students owe me anything. The obligation is on the other side. They have given me a fresh interest for my leisure.

Sooner or later we will take cognizance of the fact that hard work and profits are less than half of the business of living. Every school will have a course in Thoreau, who lived on $27 a year and had a wonderful time in the woods. Stevenson's essay in praise of idlers will be a required study.

Just this morning I read of the consolidation of two great banks. The principal man in the consolidation announced that he "expects now to work harder than ever." One must take that attitude in America or lose caste. But why must he work harder? Because there is too much work and not enough workers? Nonsense. By staying on the job he keeps younger fellows down. Because the bank would suffer if he let loose? Double nonsense. The whole attitude is false. It is just that we have got the habit and are afraid — afraid to have time on our hands.

I walk sometimes in graveyards. I say to myself, "Here lie many hard-working men. All were indispensable. Yet the world has dispensed with them, and somehow it carries on. Let me, therefore, not take myself too seriously. Let me read a little, and play somewhat, and laugh whenever possible. Let me get myself ready for the Kingdom of Heaven into which only those enter who have become as little children." . . . Little children can be happy part of the time doing nothing at all.

Tilden Versus Old Man Time

Condensed from the New York Herald Tribune Magazine (September 29, '29)

William T. Tilden, 2nd
Seven Times Tennis Champion of the United States

OLD Man Time is the arch enemy of every athlete. He is the one certain victor over every champion in every sport. Nothing can defeat him. All one can hope to do is stall him off as long as possible.

While some great stars have matured very young — notably Bobby Jones, Wykoff, Junior Coen and Vincent Richards — it is pretty well established by records in all branches of sport that an athlete reaches his peak of physical condition at about 25. How long a man holds that peak depends greatly on the individual, but his span should be not less than 5 or more than 15 years. Many promising athletes reach their peak and are gone by 25. One hears of countless schoolboy wonders burned out before they are out of college.

A notable example of an athlete passing his zenith before 25 was Maurice McLoughlin, the great tennis star who at 21 was a world champion and at 25 practically a memory. It looks as if young Frank Wykoff, the great California track star, was destined to burn himself out in his "teens."

Still, these exceptions do not refute the generality in any way. At 25 a man has attained his full physical growth, consolidated it, settled and hardened his frame and should, if ever, have perfect command of his physical resources. In experience and mentality he should have matured enough to have a background that can cope with most of the tests he is called upon to face. In every way he should be at his best.

It is here he faces the problem of how long he can hold his place. Ty Cobb was still the greatest ball player at 40. William A. Larned was American tennis champion at 40. Norman E. Brookes was Australia's best at 44. Walter J. Travis was one of the world's great golfers at well past 40. Every star is a law unto himself. Yet in common sense, training and form lie the answers to how long he will last.

When a man achieves a championship, the most insidious enemy he will be called upon to face is the adulation he receives at the hands of the public. No one becomes more popular over night than the new athlete-champion, no one is forgotten so com-

pletely when he falls. Common sense must face this fact and by so doing should prove a shield to ward off the dangers of popularity.

Swelled head is a great ally of Old Man Time. Nothing leads a man into carelessness and lack of training quicker than a swelled head. In the days when he is working to the top, a man, no matter how great, receives enough defeats and set backs to keep his head fairly level. Once at the top these salutary measures cease. No longer is there some one who is admitted to be better. There is no step ahead for which he must strive.

Physically, the first sign of Old Man Time scoring on an athlete is in the legs. I first felt signs of this leg-weariness coming on me sooner in matches when I was about 30. It was not a great change — on many days I did not notice it. But I felt an unreliability as to perfect condition. Until I was 30 I was certain I could produce my best tennis physically and mentally on any given day. Today at 35, I know that at my best I am as good or better than ever, but that I hit my best tennis — physically and mentally — only a few times each year. I can never be absolutely sure I will be right now.

Old Man Time hits at a player's coördination of mind, eyes and hand. There is a tendency after 30 to coördinate less rhythmically, less instinctively. It requires greater concentration. Up till 30 a man's physical resources are almost instinctive; after that age they must be forced.

I am convinced that tobacco and alcohol do much to age the average athlete. I do not refer to the idiot who smokes all the time or attempts to drink all the liquor he can get. Even moderate drinking and smoking, I believe, greatly increase the task of reaching and holding competitive physical condition. I do not drink, but I do smoke, and I know I can feel a difference after three weeks without tobacco.

Common sense and training are physical safeguards, but they alone are not enough to hold Old Man Time in check. Only an athlete with that much discussed, much maligned thing called "form" can really beat Old Man Time for a long stretch. My definition of form is, "the maximum result for the minimum effort." That to me is the perfect form in sport. A great athlete with good form, as the years roll by, has made form so much a part of himself that he finds ways to save steps and cut down waste movement, quite impossible to the man who has not the form or the technical ability to do it.

I have no great sympathy for the "schoolboy wonders" who blow up. In nine cases out of ten

it is their own fault. Either they are great natural athletes who did not have intelligence enough to learn sound form, or they believed they could dispense with common sense and training and still get by.

In these days of competition it can't be done. Every year that goes by in my tennis career, especially since I passed 30 and found that in the eyes of the world I was an "aged net star" or "decrepit veteran," I am more convinced that care and intelligence can keep an athlete near the top of his sport up to 40.

There is one terrible ally to Old Man Time, one that is purely psychological. That is the falling off in the "will to win." Continued success stifles the will to win. That is why champion football teams suddenly lose and great individual champions blow up at the height of their prowess. "Staleness" is simply a temporary loss of the will to win, which has become a kitten, when before it was a tiger.

Only a burning will to win can drive a body through the tortures of the closing stages of any great athletic competition. In track, rowing, tennis, football and, at times, baseball, the actual physical suffering is very great. Only a tremendous will to win can rise above the physical desire to quit.

I know that the one great difference in my tennis over the last three years has been my unwillingness to take the punishment I used to take gladly. It is not that I have gone yellow. It is just that today at 35 I do not believe my personal satisfaction in victory is enough to pay for the trouble it involves. Yet, given the necessary stimulus, the will to win still is there.

When the Davis Cup match of 1928 came around, with all the world saying I was through and a set-up for Lacoste, when a victory kept the United States in the cup battle and defeat meant certain loss of the cup, the old will to win glowed so strongly that I rose above age, nerve strain and very poor technical tennis to win in five sets, very much to my own surprise.

Age tends to kill the "play instinct" that is so predominant in youth. In that play instinct of the child — the love of competition, we call it in after years — lies the will to win. Old Man Time wins his ultimate victory over the athlete by first robbing him of his will to win and then by cutting down his physical resources.

If he avoids the damages of swelled head and does not allow either his success — or lack of it — to destroy his will to win, uses common sense and follows training rules, a man should remain at the peak of his physical powers at least till he is 35.

The New-Type Farmer

Condensed from The Country Gentleman (October, '29)

Charles Josiah Galpin

THE steady decrease of our farm population gives the average man a sense of uneasiness about agriculture. Many farmers are actually ceasing to farm, and are moving to swell the ranks of city workers and eaters. Yet it would seem that, as the nation's mouths increase in number, the farm population should also increase. Something must be out of joint.

The new-type farmer is the joker in the logic. This farmer has learned to increase his wheat and butter without increasing the number of hands to do the work. He "knows how" — which is to say, he is scientific.

The work of the new-type farmer has been gradually revolutionizing the farm, and even remodeling the man behind the plow and the herd. The new-type farmer struck up a very friendly acquaintance with the soils of his farm; he jollied the sour ones with lime, jacked up others with salts, fed them legumes, and then egged his perked-up soils on to his corn, wheat, and potatoes. He fashioned a better kernel on the cob and a better ear on the stalk. He learned what made winter wheat good, and at the last moment threw a double dose of protein into the head. He hit upon a standard family size potato that the housewife liked. He went after bugs, beetles and borers with poison and gas. He serumed his pigs and shaped them for the selling scales. He turned eyes and testing tubes on his dairy herd, slashed it here, petted it there, fed it according to formula, and then watched the butterfat roll up.

In fine, whatever the crop, whatever the animal, this new type of farmer knows how to breed it, feed it, and sell it. His theory is that neither luck, tradition, nor old wives' tales can take the place of knowing how to farm. No wonder, then, that he discards hand tools and puts in the machine — the tractor, the combine, the milking machine, and so on. Moreover, the more he knows his job, the better he likes it. Getting close to his problem stirs his brain power into action, and the farm job takes on all the aspects of a challenging business.

Now it is nothing new that science is thus striking out into farming. But not everyone has yet realized the meaning of this movement — that the old "farm-

ing with ordinary skill" will soon be passing into history as a tale that is told. This is no discredit to the old farmer; he was a fine type of man. But one of these newer farmers knows how to produce twice as much as the old farmer. Moreover, he has the ingenuity to improve his products, making them more desirable to the buyers. The "ordinary skill" farmer produces only mediocrity.

Will the farm population, then, continue to decline? Undoubtedly it will continue to decline to a point where the effective scientific machine farming will produce all that is needed. Is this the end of the story? By no means.

The recent revolution in farming has concerned itself with crops. But the progressive farmer is convinced that the same scientific methods he has learned to apply to running his farm can be used in conquering his other difficulties. The farmer's living conditions for instance — community institutions, social status, opportunity for enjoying life in equal measure with persons in other occupations — have always had points of serious deficiency. Another revolution may occur here.

Science will penetrate and ramify through every phase of farm life. The new-type farmer is learning that men make their own living conditions, and that human elements can be combined to make needed institutions. He is not going to listen to the people who tell him that farmers can't get social amelioration. Does the farmer want facilities within reach for the health of his family? Yes, and he is going to change the health organization of his section and have doctors and a hospital. Whatever he wants that average town communities enjoy he will learn to get.

When science was put into the hand of this new kind of farmer he was given a far-reaching talisman. And if anyone thinks that the farmer will confine his Aladdin's lamp to wheat, cotton, and milk, he will be gravely disappointed, for the men who are coming to dominate farming are bound to know how public business is managed, how sound economic institutions are built, how living is made better — in fine, how things are done by humans to bring welfare into being for themselves. He is looking to science to see him through and, for one, I believe not in vain.

When Night Clubs are Trumps

Condensed from The Ladies' Home Journal (October, '29)

Frederic Arnold Kummer

Author of "Ladies in Hades," "Maypoles and Morals," etc.

"WHY do people go to night clubs?" I asked the manager of one of New York's smartest resorts.

"Because they are damned fools," he said. But he winked as he said it.

We entered a big room against a billowing wave of cigarette smoke, perfume, and noise. Wooden noise, from the pounding of rattles on table tops. Brassy noise from the orchestra. One felt, rather than saw the bizarre decorations and sensuous lights. A girl was dancing beneath a baby spot. Her shapely body flowed like milk.

All around were faces staring — cool, cruel faces, gray with the night-club pallor. Young faces and old ones, ugly and beautiful, stupid and daring.

As we took our seats the dancer finished her number. The rattles gave her staccato applause.

From the table behind us came a protesting female voice. "But, Henry — the woman was practically naked!"

"I know, my dear, but such attractive nakedness. No one could ever say they married *her* for her money."

Bottles began to appear with amazing swiftness. All sorts and conditions of people. Business men and bootleggers — college boys or Broadway racketeers — society leaders or kept women — who could tell? Everybody seems to be drinking. Is that where the thrill comes in? Scarcely. Those who wish to drink do not need to sit up in night clubs to do it. It would be easier at home.

A blast of applause sent the cigarette smoke whirling. A superbly built girl appeared to do an Indian dance. Her body interpreted the sex motif. The virility of her naked form was astonishing. Men rose and applauded. The audience went wild. In the eyes of the women were feline glints. Here was real competition. For the first time the room became silent. Something swept over it like a flame. You could almost hear the beat of the tom-toms — feel the hot glare of a tropic sun. Under a brilliant spot the girl finished her dance in a huddle of quivering flesh.

More drinking. Many dry throats, after that blazing dance. Five men at a table were pounding in unison. They had found the Scotch good. A small girl with vivid burnt-orange hair — one of

the official hostesses — joined them. One of the men drew her down beside him and talked to her earnestly, persuasively, but she merely shook her head.

"He seems to be trying to string our little friend," I said. A wise-cracking hostess glanced over her shoulder. "Swell chance!" she laughed. "The only way anybody can string *that* baby is with pearls. She doesn't believe in free love."

The girls of the ensemble now came out for their concluding number. Their sketchy costumes were made of pink silk; it was necessary to look twice to be sure they wore any at all. Shouts from the tables. A few gasps.

Not everyone, however, is under the same spell. Through a lull in the clamor comes a rasping voice. "Talk about your high-priced authors, I'd like to know who wrote this bill of fare!"

Suddenly the line of girls receded like the foam of a breaker. In a moment the floor was clear for those who wished to dance. The orchestra began a distracting bit of jazz.

A commotion near the doorway attracted my attention. An unhealthy-looking youth had just come in. His face was flushed and swollen — the rings under his eyes looked like balloon tires. His air was that of one who owned the place.

"Not a pretty sight, is he?" I remarked.

"No," agreed a society lady at our table. "He's disgustingly drunk most of the time, and a rotter all of it. Yet he's being invited everywhere. He's got millions."

"Why do people have him?" I said.

"Why did his mother have him?" she replied disdainfully.

More people were dancing now. The small floor was packed. The multicolored lights at times made the faces ghastly — the faces of witches and satyrs. At others one saw a revel of dryads and fauns.

I had asked the manager earlier in the evening if any members of the underworld were present. He came over to me now. "Want to see a couple of big shots?" he asked.

I nodded. His eyes moved toward a man and woman, dancing. The woman was quietly dressed, handsome. The man, stout, in his fifties, looked like a dignified but somewhat tipsy bishop.

"The woman is the sweetheart of a big gambler. Runs a floating crap game. She could give the police the lowdown on at least two underworld murders, if she wanted to and didn't know she'd be bumped off if she did. As it is she's scared stiff she'll be taken for a ride anyway, just on the chance she might talk. Can't sleep

nights. That's why she comes here."

"And her partner?"

"One of the biggest booties in New York. Operates in carload lots. Millions of dollars back of him."

I stood for a moment watching the other dancers. Many beautiful women. A sprinkling of young girls. Astonishing, I thought, such a man rubbing elbows with young girls from Park Avenue. Still, for all I knew, he might be doing business with their fathers. Some of the dancing going on was scarcely pretty. No matter how sophisticated a man may be, there are limits to what may be done in public. But nobody here seemed to care.

The music, a hit from one of the shows, had turned both the dancers and the orchestra into mad acrobats. Snare drums and brass ripped the air into crazy-quilt patterns. The waves of cigarette smoke, of perfume, of raw humanity had taken on alcoholic overtones. Two men, with hot-eyed girls, rose from a near-by table, went out.

It was three o'clock, and as sight-seers began to leave, the real night-club hounds began to appear. There are many of these, wealthy, idle, who find themselves, at midnight, like the deceased atheist, "all dressed up and nowhere to go" — except the night clubs.

Astonishing places, to which people go for astonishing reasons. I heard a few, from "Because they are damned fools" to the classic remark of an ex-Follies girl: "What else is there to do until breakfast?"

To the great mass of people the real lure of the night clubs is that abused word, "sex." The atmosphere of such places reeks with it, the tight-clasped dancers sway to it, the naked girls embody it.

When I finally got to sleep that night I was surprised to find Satan sitting on the edge of my bed.

"What do you think of the night clubs?" he asked.

"You have done very well with them," I replied.

Satan stared at me, then shook his head. "No," he said, "I'm disappointed in them. Too much activity. I'm getting much better results from parked cars. People need leisure, and privacy, to do anything really wrong. I've simply got to think up some way of improving the night clubs."

Science Notes

Excerpts from Popular Science Monthly

"THE automobile of the future will make the present-day contraption look like a hay wagon. Within ten years we'll have automobiles safely traveling 100 miles an hour, weighing less than 1000 pounds, costing less than $1000, and covering 80 miles on a gallon of gas. Take the matter of a car's weight, for example. Lightness of construction is something we learned from airplane construction. Aluminum, lynite and invar all came into automobile construction by way of the airplane. And right now we are perfecting a new metal 15 times stronger than nickeled steel, yet only one-third as heavy as aluminum. If we can make a lighter chassis, and an engine which, in proportion to its size, is much more powerful than the gigantic masses of steel that used to be under automobile hoods, you can see why we are going to need less gasoline. We are also improving methods of carburetion." — *Charles F. Kettering, President of General Motors Research Corporation, and inventor of the self-starter, Ethyl gas, and the Delco ignition and lighting systems.*

Conservation of enormous quantities of petroleum will be made possible by a new process of refining, invented by German scientists and developed by American chemical engineers. A refinery employing the new technique is being built by the Standard Oil Company of New Jersey. Application of the process is said to result in the production of 100 percent of gasoline from every barrel of oil. At present, an average of only 40 percent is obtained by the cracking process.

A two-passenger automobile, only five feet between wheels, weighing 600 pounds, running 50 miles to a gallon of gasoline, and costing about $200, is expected to appear on the market within six months. Three of the motor dwarfs have already been built. The inventor is James V. Martin, an airplane manufacturer of Garden City, N. Y. The car is so small that it turns completely around without crossing the center line of the average road. A speed of more than 60 miles an hour is claimed for it. Its wheelbase is 60 inches; the smallest American car now in production has a wheelbase of 103 inches. It is planned to deliver the car in a weather-proof packing case with hinged doors that houses it permanently. A large mail-order

house is reported to be considering selling the new models by mail.

A bulbous bow that presses water down instead of to the side, and a stern lifted from the sea by the propellers helped the *Bremen* to earn the title of the fastest liner. Streamlined throughout, even to the funnels, the *Bremen's* curious shape, bulging in front and tapering behind, is designed to offer the least resistance to water and air. The shape assumed by a falling raindrop is applied to the funnels and, under water, in blisters — one on each side — which give the vessel her pear-shaped bow.

The new Dornier plane, 230 feet long and 33 feet high, weighs almost four times as much as the largest plane previously built. In her first trial flight with 25 persons aboard, she rose from Lake Constance, Switzerland, easily lifting her 55-ton loaded weight after a run of only 28 seconds, and flew at 131 miles an hour. She is designed to carry 100 passengers on short cruises, besides a crew of 16. In addition to passenger compartments and staterooms, a combination dining room and library is provided. A tunnel in the wing permits repairs in flight to any one of the nine motors. Indicator lights in the control room show when any motor needs attention. Three decks are provided for the control rooms, passenger accommodations, and fuel and storage compartments.

A new bomb-aiming device that enables an airplane flying 1500 feet high to drop a 100-pound bomb down the smokestack of an enemy battleship has just been purchased by the United States War Department. Army officials say that such a projectile would do as much damage as a two-ton charge dropped on the ship's deck, since the smaller projectile would explode in the ship's most vital part. The device that aims bombs with such astounding accuracy is "as intricate as a chain of Swiss watches." It is a bomb sight that takes into account the speed of airplane and ship, the movement of the air, and "air pockets."

A wheel of light, 1000 miles in diameter, will have its hub at Chicago when the colossal two-billion candlepower searchlight, recently offered the city by Elmer A. Sperry, New York inventor, is installed. The $100,000 aerial beacon is to be named "Lindbergh Light." On clear nights, its beam, reaching 500 miles, is expected to sweep in a circle that will touch 12 states. It will be visible to night flyers from Buffalo, N. Y., on the east, to

Omaha, Neb., on the west and from the Canadian border above the Great Lakes, on the north, to Memphis, Tennessee, on the south!

A new mechanical money changing machine infallibly detects counterfeit coins. When a quarter is given to the robot, before it returns the five nickels, it automatically weighs the coin, analyzes its metallic content, and determines if its size is up to standard. Each time a counterfeit coin is put in the slot, the machine returns it with the request "Please use good coins only" uttered by means of a phonograph record.

This is the latest machine to join the army of selling robots. The first robots had scant vocabularies, contenting themselves with a hearty "Thank you." Now the thanks is followed by such famous trade slogans as "They're toasted," and "Not a cough in a carload." One of the machines will speak its short piece 10,000 times before wear makes necessary a fresh record. The voice device has been applied to machines selling many sorts of cosmetics, candies, apples, root beer, and gasoline.

The steam locomotive met and was vanquished recently by its first primary power rival to emerge since Stephenson produced his *Rocket* nearly 100 years ago.

An oil-electric locomotive kept pace with the International Limited of the Canadian National Railways, on a run of 334 miles from Montreal to Toronto. The victory of the oil-electric was on the basis of operating cost. For the steam locomotive used about $80 worth of coal on the run, while the new-comer used only $25 worth of oil.

The oil-electric may be put on the tracks ready to operate without a costly power plant or third-rail system. It is a primary power vehicle — that is, one that generates the energy it consumes. The locomotive consists of two units. Each has a 12-cylinder Diesel engine which drives an electric generator, which in turn moves individual motors that spin the four pairs of driving wheels on each unit.

The oil-electric accelerated to 60 miles an hour in about two minutes, or about twice the rate at which a steam locomotive performs this feat. It maintained a speed of 70 and 75 miles an hour, for many miles.

It is predicted that the oil-electric will eventually displace the steam engine and delay or postpone electrification. *New York Times*.

Rattlesnake Farming

Condensed from The Scientific American (May, '28)

Uthai Vincent Wilcox

TWO young men of the West have established their own dairy farm, and they have no competition. This farm, perhaps the most weird in the world and yet the most lucrative in proportion to its acres, is all of 20 feet square and ten feet above ground on the platform of a water tower. The "cows" are rattlesnakes.

The serpents are milked regularly and the venom which is extracted is sold to special laboratories where it is used to make a serum that may some day save the life of some poor man or woman who has aroused the ire of a rattler while out tramping.

These pioneers in this new reptile industry are Leonarde Keeler and E. L. Woolsey, who first dated their interest in snakes to the time when, as Boy Scouts, they roamed the sun-baked hills bordering San Francisco Bay. When they needed extra money to put them through the University they found it in this first boyhood interest.

The snake farm is in an old water tower near Menlo, California. Here great crawlers have the choice of basking in the sunlight, or lying in a heated den. The basic source of supply is occasionally a problem. Mr. Woolsey said that they made expeditions to various parts of the country in quest of their scaly milkers.

"Last summer we went to Arizona where we collected many fine specimens with the aid of the Navajo Indians whom we hired to track the reptiles. Incidentally we viewed the Hopi Indian Snake dance and came very near losing our lives because we followed one of the Indian runners, hoping to get one of the snakes used in the dance. We wanted to see if its venom sacs had been tampered with. We didn't find out," he admitted.

"In winter, when our supply of snakes runs low, we get some from Texas, the home of the diamond-back rattler. In winter, too, we have to resort to force-feeding, because rattlers refuse to eat then and are of little use as 'milkers.' We put Hamburger steak mixed with water in a long tube, and expel the food down the snake's throat into his stomach.

"During the summer months we have no trouble. The reptiles will eat voluntarily and demand

plenty of rabbits, mice, rats or guinea pigs. These all have to be lively for they will not touch any dead or diseased food."

The bigger the snake, the better milker he is, but the danger is all there whether big or little. The snake that is to be milked is taken from the cage with a hooked stick and put on the floor, where his head is held down by another stick. Then the noose is slipped over his head and drawn tight on his neck so that he cannot move his head.

"One of us holds the snake while the other extracts the venom. It is most necessary to hold the snake, I assure you, for they are pretty powerful and will thrash about wildly otherwise.

"Next we open his mouth with a spatula. A small glass dish is placed so that the snake's fangs protrude over the edge. We then press with the thumb and index finger on the poison sacs, which are located slightly below and behind the eyes.

"The dangerous part lies in the care that must be taken that the fangs do not slip off the edge of the dish, for if this happens, the reptile can bring his fangs down and inject his deadly virus into our fingers! Naturally that wouldn't be so good.

"As pressure is brought on the sacs, an amber colored fluid flows from the fangs into the dish. This is the venom, which causes quick death when injected into the blood stream of any mammal. We get about 20 drops of venom every other week from the largest rattlers."

Mr. Woolsey explained that after milking all the snakes, the poison is placed in open dishes and dried, reducing it to a powder. This takes considerable care as the containers must be chemically clean. The dried venom is then sent to the laboratory where it is used to make a serum.

These youthful scientists are doing research work with their reptiles, working in conjunction with the serum laboratories. They are under contract to supply a regular amount each week in the year.

So far as is known by Keller and Woolsey, they are the only ones in the country who have a rattlesnake dairy, though there are a good many snake farms for supplying zoos and circuses. Both of them have been scratched by the fangs but neither has as yet been struck. Their easy handling of the great snakes speaks both courage and expertness in their peculiar work.

Wall Street Branches Out

Condensed from The Outlook and Independent (September 18, '29)

Charles J. V. Murphy
Former Staff Member of the New York World

IT was only a few years ago that Wall Street was a target for the nation's most virulent oratorical sharp-shooters. Were the Balkans to steam a bit, measles to break out in Kansas, a bank or two to close in North Carolina, and at once the stalwart paladins of public conscience poised their lances and charged, dialectically, into the little winding street that runs off Broadway.

Wall Street! Festering place of our national ailments, breeding place of dastardly, but legal skulduggery. There dwelt the Morgans, the Goulds, the Carnegies, bloated figures with dollar signs at their waistcoats and widow's scalps on their belts.

But that was yesterday, as the horse car, the corset and the stocking bank were yesterday. Today, Main Street has become Wall Street. For Wall Street is a state of mind; 20,000,000 men and women — investors and speculators — are its corporeal being; and the chattering tape that runs under the glass domes of 12,000 tickers, up hill and down dale, are its hypersensitive nervous system. In Harlem, Bangor, Denver, San Diego and Atlanta men hang breathlessly over the story it tells.

The public is in Wall Street, and Wall Street is in the public. And this merging of personalities has produced the most spectacular thing this nation has ever witnessed.

When the World War ended, you and I and our neighbor heard much talk of "prosperity." It stood for money in the pocket — in the bank. And we were determined to have some part in it. So we put what eggs we had in our basket and went to Wall Street where we put them up as margin for exciting expectancies called stocks. Bonds seemed so dreadfully old-fashioned. Bolder people followed. Industry waxed fat, dividends fell like over-ripe fruit, and stocks boomed. Brokerage houses opened branches in inland cities whose population used to distrust even the savings banks.

One day recently I was talking with a man in a brokerage office while he was having his shoes shined. The bootblack's eyes kept looking hungrily at the tape rustling in a corner. Finally he could control himself no longer. He grabbed the tape.

"Are you interested in the market?" I asked, amazed.

"Me and me brudda," he answered ecstatically, "we gotta da Steel."

Not long ago the Federal Reserve Board lifted the rediscount rate in an effort to deflect credit from the red-hot crucibles of speculation to Mr. Hoover's poor farmers. Did the nation applaud this spanking of profligate Wall Street? Hardly. From one end of the country to the other roared the cry that the Federal Reserve was a silly reactionary playing politics.

Not all the speculation is being done in the supposedly more speculative East. On a 5,000,000-share day on the Big Board, nearly $200,000,000 worth of buying and selling pulses through the wires that lead to scattered and distant cities. That means that the citizenry removed from Wall Street contributes 30 percent to the day's volume as a rule. By itself this fact impresses as to the extent of Wall Street's quiet penetration into the hinterland.

The growth of the "odd lot" business is another remarkable phase. Time was when the more elegant houses in the financial district contemplated with faint distaste such poor men's dabbling. But nowadays the nicest houses cultivate them. They comprise about 40 percent of the Stock Exchange's daily business.

Speaking broadly, "odd lots" mean the public. It is a device by which those of us who can't afford to purchase the lowest unit of trade — 100 shares — allowed on the Exchange, are enabled to buy and sell in fractions. The ticker tape never records these sales, but their combined buying and selling power is Niagric. In a 5,000,000-share day, these isolated "odd lots" may blend into a 2,000,000 total.

And the persons behind these staggering digits are laundrymen in San Francisco, mechanics in Detroit, push cart peddlers in New York, widows in Boston, and millions like them.

It is a most expensive kind of trading. Since "odd lot" houses are dealers, not brokers, they levy a charge of a quarter or an eighth of a point above (when you buy) or below (when you sell) the market. To that sum the broker adds his commission. By the time the small trader has bought and sold he has spotted the market about two points. But the public is always bullish. It is willing to accept these handicaps.

The extent of the public's participation has placed a terrific load on the over-worked ticker. Not long ago the ticker was the fastest news courier in the world. But marvelous mechanism that it is, it is no longer fast enough for its job.

The function of the Stock Exchange is two-fold: (1) to provide a trading place for stocks and bonds and (2) to announce these sales — at once. The one is as important as the other, for they are internally dependent. The most heroic entrenchments have failed to keep the second function abreast of the first. Characters have been shorn to cabalistic symbols. The sale of 100 shares of Steel, which used to read on the tape 100 US 112, now reads X 112. General Motors has dwindled from GMO to GM. Fractions of seconds have been penuriously scrimped. Electrical impulses to relay points have been accelerated; one one-thousandth of a second was saved here and there, and by such devices was the ticker's output boosted from 235 characters a minute to 296. Still trade moves faster. It is a rare day, now, that the ticker is not four minutes behind the market; and on one grievous day it lagged 100 minutes. A corrective, however, is promised. The Exchange is now experimenting with a new ticker — a marvelously fast machine capable of producing 900 characters a minute. This means tearing out all the old machinery, costly stuff. Nevertheless, the change seems to be economically worth while.

All this has had a most striking influence upon the country's press. From being "too technical," for the average reader, financial news has risen to front page stuff. Where the greatest newspapers ran two or three pages of financial news ten years ago, they now run 15 solid pages as an ordinary thing. The placards on the sides of newspaper trucks, which used to blazon the promise of the snappiest race track summaries, now clamor for attention for their "latest and most complete financial reports."

Editors have said — and it is credible — that the public's awakened interest in markets has changed the complexion of the entire daily news report. Since her affairs impinge directly upon our national prosperity, Europe has become a more vital element in the news. Stories of European politics, crops, budgets, and whatnot, which not long ago would have speedily found their way to the editor's wastebasket, are now welcomed with palpitating headlines.

It does seem rather far-fetched, though, to believe that the public understands or cares much about very technical financial matters. What most of us are seeking, actually, is "red hot tips." A New York publisher, who made millions by getting in on the ground floor of America's self-discovered concern with sex, seems to have tapped another latent reservoir of desire by

bringing out a daily tabloid devoted exclusively to financial news. Its price is three times that of any other afternoon newspaper. But its circulation is booming.

For months, a morning tabloid, the *New York Daily News*, has been featuring a financial writer whose function is avowedly that of tipster. "Dupont is a corker . . . there's at least 40 points in it if bought at the market. . . . Stick with the Standards of N. Y. and N. J. . . . For a high-flyer, Eastman Kodak can't be surpassed. Buy Montgomery Ward and reap a substantial profit by August 26. . . ."

And so on, day after day. Some experts who have followed the predictions of this artist say he has averaged six percent correct. Certainly he has been immeasurably assisted by the great Bull Market. His rival newspaper writers are wondering how he will fare when he must try to pick winners in a falling market.

Savings banks have been not a little alarmed over the migration of money which used to remain soberly in their vaults gathering four percent interest. It has now gone adventuring among common stocks. Down on the lower East Side, the stock market has opened a new door to El Dorado. There are push cart peddlers who appoint an agent, chip in $15 or $20 each, and buy two or three shares of General Motors or U. S. Steel. Dividends are rigidly split, and the profits of sale divided perhaps ten ways.

Another fascinating phenomenon has arisen on the American scene — the investment trust. People too timid to risk their own judgment and money in the stock market can now buy brains to invest and speculate for them. At this writing there are more than 450 investment trusts in the market, with a total capital of three billion dollars. So numerous have investment trusts become, in fact, that it was recently predicted that an investment trust for investment trusts will soon be formed.

In one sense, these trusts are the public's own defense against itself. These trusts act as great cushions against the market's shocks. When matters started to go to pot a few weeks ago, it is said, many of these trusts pegged the crumpling leaders by throwing huge buying orders into the maelstrom. The weaklings then took heart. Such influence, such terrific resources in reserve, have given the market an internal buoyancy it never possessed in the old days.

Since everybody in Wall Street is intent upon making money, they all seem to have hit upon the happy solution of keeping the Bull Market on the hustle. Verily, it is a weird business.

It Seems to Heywood Broun

Condensed from The Nation (July 31, '29)

Heywood Broun

Essayist; Columnist for New York Telegram; weekly contributor to The Nation

THEY say that elephants are very smart because they remember the boy who gave them a plug of tobacco in the summer of 1891 and squirt him with water when he comes around again in the late spring of 1929. I can't see the wisdom in that. The gray-haired gentleman who gets the drenching very possibly has forgotten the tobacco incident. Retribution is singularly ineffective unless both sides are conscious of what it is all about. And after 39 years the victim of the elephant's revenge has probably so much on his conscience that the boyhood practical joke has entirely escaped him. It was stupid of the elephant to take the tobacco in the first place, and still less intelligent for him to devote mental store-room to a grudge when that same space might much better have been employed as an arena for mental effort.

"But," says an elephant who happens to be looking over my shoulder as I write these words, "I didn't get a chance to square up with him when he gave me that tobacco in the summer of 1891. He told me it was chocolate and walked away before I got it into my mouth. After I strangled on it and spat it out he was gone. I looked around and I trumpeted, but he'd skipped. I had to stow away the grudge and store it up until he returned 39 years later with a brown beard and three children."

"Come, come," I say to the elephant severely, "you know as well as I do that we live largely through introverted processes. It wasn't your throat or your trunk which was injured by that plug of tobacco but your ego. I think it ought to have been possible for you to say, 'Oh, he's just a sap,' and dismiss the matter from your mind. No humiliation caused by a thoughtless boy could possibly have been profound to you at your age. The thing became important only because you stored away the memory and treasured it. You had every right to get mad. I admit that. But you tell me you did get mad. The emotion was not suppressed. It came into consciousness and you trumpeted. Nursemaids screamed and children ran from in front of your enclosure in terror. It was an effective expression of your

righteous rage. What more do you want?"

No man who has expressed his anger with reasonable fluency need go back to it again. Revenge is a form of procrastination. The man who eases his soul by paying off a score at the end of 20 years confesses that he didn't have the nerve or the mental alertness to handle the situation when it lay immediately in front of him.

Civilization imposes restraints which we must accept, but not all of them. It is necessary that we should resist the impulse to cleave every skull which invites us to swing the nearest dull blunt instrument. But on the other hand it is silly to remain sewed up to the last notch of buttoned existence as prescribed by the codes we call courtesy and good form.

Let us say, for instance, that I am affronted by Mr. X or Miss Q. I may take the injury smiling and calmly and make no retort, but that is bad business all around unless I am completely insulated by an utter contempt for Mr. X or Miss Q. In that case it may not be necessary for me to display anger. But if we meet on equal terms, then it is up to me not to deceive myself, or them, for that matter. If I do not behave in an angry fashion or even admit that I am angry evil consequences will follow. The incident will impair my blood pressure and my digestion and, also, my friendship for Mr. X and Miss Q. Generally I like X. Often I admire Millicent Q, but by holding back from anger when I have every reason to be angry, something permanent may go into my chemistry which will always function whenever I am in the presence of these people. A valuable friendship has been marred because I have made a silly sacrifice to courtesy. What I should say is, "Andrew X, I think you've done a mean and contemptible thing." Or, "Millicent Q, you talk like a half-wit."

And after all of that has been said there is still an excellent chance that we can go on being the best of friends. Miss Q may be the sort of person who believes that friendship is a bond which imposes a constant obligation of friendliness. Well, then, the more fool she. Obviously no close relationship can be maintained without pendulumic variation. And certainly the thing to do with grave distaste is to let your anger blaze fast and furiously and subside in embers.

The High Cost of Hoodlums

Condensed from Harper's Magazine (October, '29)

John Gunther

Written in collaboration with Mr. James W. Mulroy, an authority on racketeering. Both Mr. Gunther and Mr. Mulroy are connected with the "Chicago Daily News"

CRIME is costing me money. It is costing money to the taxi-driver who took me to the office this morning, the elevator boy who lifted me ten stories through the steel stratifications of a great skyscraper, the waiter who served me my luncheon, the suburban business man who sat at the next table. The ordinary citizen in Chicago pays literal tribute to racketeers, like as not, whenever he has a suit pressed and every time he gets a haircut; he may pay it in the plumbing in his house and the garaging of his car; the very garbage behind his back door may perhaps mean spoils for someone.

How, briefly, does a racket work?

Suppose I am a hoodlum with a few friends among crooked labor leaders and perhaps among politicians. I am in a position to hire thugs and gunmen. I form an organization and I choose a field. Suppose I choose pretzels as a field. I then "invite" the pretzel dealers of Chicago to "join" me. From each of them I demand, say, $100 a month. For this sum my men will "protect" them from competition, since they must raise their prices to pay my $100. If any pretzel man refuses to join me I bomb him. I slug his drivers. I cut off his supply. Meantime I delimit the pretzel market and make anyone who wants to enter the business pay me handsomely first. I extend my pretzel monopoly in one direction to the big wholesalers (since I control the dealers), and in another direction to the small shopkeepers (since I control the jobbers). And from all of them I exact tribute. The price of pretzels meanwhile goes up. Simply because I say so, the pretzel people pay a levy to me, and the consumer pays the levy. That is the essence of racketeering — simple extortion based on simple threat.

The argument of the racketeer to the business man is also simple: "Look here. We'll stabilize prices. Today you get $1.00 a bundle for your (for example) laundry. We'll organize the laundry business and raise the price to $1.50. We'll eliminate competition. Meantime you pay us $20 per month."

And if 1000 laundrymen join the "association," the racket is worth, at the outset, $20,000 per month. If anyone withstands the racket arson is his lot, or bombs.

There are 91 rackets in Chicago today, according to the state's attorney's office. Some few are "dormant," it being a characteristic of rackets that they lie low periodically. This often merely means that the leader has shifted his activity to another racket.

The cost of these rackets to the people of Chicago is estimated by the Employer's Association of Chicago, an anti-racketeer organization, at $136,000,000 per year, or approximately $45 for every man, woman, and child in the city.

Some progress has been made in the fight against racketeers. Within the last year, for instance, 29 rackets have been put out of business. Federal action frightened and crippled others. And a few months ago a Racket Court, the first in America, was set up as a branch of the Chicago Municipal Court to deal exclusively with racket affairs. Yet, either because of callousness, timidity, or stupidity, a group of almost 3,000,000 citizens is being led by the nose by perhaps 600 gangsters.

Let us trace a very simple instance of personal racketeering and see how it answers the question often asked, "Why does the victim submit?"

Simon P. Angelo has a little jewelry shop. Angelo sits behind his counter, peering through his lens at the intricate and beautiful mechanism of watches; his wife sells the jewelry or gossips at the front door. It is not a very big business, but Angelo has worked all his life to develop it.

A big fellow with a bluish jaw and slanting eyes comes into the shop one morning.

"Gimme twenty-five bucks — quick."

"What for?"

"Defense fund," the stranger replies briefly.

Angelo knows. He protests, but he pays.

A month passes, and the stranger comes in again. This time he asks for $50. Angelo protests, but he has to pay.

Several months pass, and the stranger, or perhaps another stranger, slips into the shop again. He looks around, growls, takes off his coat and sits down behind the counter.

"I'm in," he says. And henceforward half of Angelo's profits go to him.

What could Angelo have done? If he refused payments of any of the "collections" his windows might have been smashed or his shop bombed. Suppose Angelo had said, "I will report you to the police."

This, of course, is going on the ridiculous assumption that the

police are not in the employ of the racket. Angelo *might* just possibly find some policeman who was not a friend of his enemy; but the chances are much better that Angelo would know the penalty for "squealing" far too well to risk an appeal to the police.

Since racketeering is predicated on the concept of a threat, the items by which the racketeer makes use of force are important. Witness buying is one, so is jury tampering, so are acid throwing, window smashing, tire cutting, slugging, arson, and bombs. And so is murder. Here is an interesting little table:

Year	Bombings	Murders
1926	89	366
1927	108	379
1928	116	399

In 1926, 70 murderers (out of 366) were convicted and 8 executed; in 1927, 87 and 3; in 1928, 77 and 0. Most of those executed were what might be called small fry. Members of organized "mobs" are arrested often enough, but very rarely convicted. Since 1922 not one single racketeer murderer has been hanged.

Murder in Chicago costs from $50 up. If someone wants to take our friend Angelo "for a ride" the job can be done for less than $100. The more important the victim, the steeper the price. To kill a prominent business man might cost $5000, a prominent city official, $10,000. If a murderer should happen to be caught, he would be protected by a "defense fund" of $25,000 or more. This amount is distributed to defense lawyers, private detectives, witnesses, or, in some cases, even jurors.

A living example of the difficulty of convicting a racketeer is Maxie Eisen who "organized" the Jewish fish peddlers in the Ghetto. Maxie has been arrested and brought into court 28 times since 1918. The charges range from burglary to assault to kill. Yet Maxie has never "taken the rap," *i.e.*, spent one minute in the penitentiary.

Suppose we glance at the influence of racketeering on the pocket-book of the ordinary citizen.

The "Midwest Garage Owners Association" (racketeers like to select high-sounding names for their organizations) includes in its membership most of the 10,000 odd garages in the Chicago area. The purpose of the association was "to standardize storage charges." What happened was that every garage in the association paid $1 per month tribute on each car handled — to the association. The result of this, and other "standardization" charges, in lifting storage prices to the mulcted automobile owner is, of course, obvious.

This racket exerted pressure in

the familiar racketeer way — by tire-sticking, arson, bombs. And it employed political patronage, too, in the familiar way. A prominent former assistant state's attorney was its legal adviser. In addition dishonest policemen entered the racket — by an especial vigilance in hauling from the streets to the favored garages any automobiles left inadvertently parked along the curbs.

Even in so unlikely a sphere as excavating, a racket flourished so admirably that displacement of earth was costing $1.90 to $1.95 per cubic yard, in contrast to the normal price, 60 to 70 cents.

"No architect or other concern," charged former Assistant State's Attorney Walter G. Walker, "could select the excavator he desired for any given job. He had to take the one designated by the 'club,' which fixed prices. Any contractor trying to get excavating done by other than the designated company found himself in trouble and the work tied up by strike."

Architects have testified that they included in their specifications an item of one percent of the total building costs for racketeer graft.

In the bootblack racket the initiation fee was $15 and the assessments $2 monthly. Bootblacks who fought the racket had their windows smashed. Take barbers. Bombings in at least one big hotel occurred because of fights in the barbers' association. Or take the glaziers. Litigation is pending in this big racket. Other rackets have included coal dealers, gas filling stations, tailors, shoe repairers, ice cream dealers, garbage haulers, milk, taxicabs, plumbers, musicians, delicatessen shops, lumber, moving picture operators, painters, undertakers, and many others.

What the hoodlums are hitting at is the very essence of business enterprise in the United States. Yet all that is needed to wipe out racketeering is the prompt indictment and vigorous prosecution of all law-breakers. But no one does a thing about it.

Further, looked at in another way, many prominent people, politicians and business men, are racketeers themselves. For more important than all this hoodlumry and these stolen millions is the growing recklessness of predatory politics and business — and, of course, the impotent apathy of the public, of you and me.

Graft may be defined as a bribe to a public official in order to obtain a vested right which the courts will protect and which henceforth may be legally used. Racketeering simply applies direct action to this theory. The grafter bribes; the racketeer points a gun, saying "Gimme!" And between the two, what order of merit may be assigned?

Navies and Peace

Condensed from Foreign Affairs (October, '29)

Philip Kerr
Secretary to Prime Minister Lloyd George from 1916 to 1921

THE central fact in Anglo-American relations is that any serious war on the face of the earth is likely to precipitate an Anglo-American conflict over belligerent and neutral rights at sea. The main reason why either Great Britain or the United States thinks of building a navy against the other is that it may be able to protect its neutral trade in the event of the other going to war with a third party.

Now it is quite clear that this problem of the "freedom of the seas" cannot be solved by allowing Britain, with "command of the seas," to exercise her own discretion in regard to interference with neutral trade.

It is equally clear that the problem cannot be solved by making the seas "free" to the trade of all nations in time of war, *i. e.*, by entrenching neutral rights, for the enforcement of absolute neutral rights would nullify all effective international action for dealing with an aggressor to prevent war. The "freedom of the seas" is inseparable from the freedom of the world, for if the sea were "neutralized," land powers would be left with belligerent rights which were denied to naval powers.

Nor can the problem be solved by attempting to re-codify maritime law so as to define neutral rights. The last war proved that it is impossible to distinguish between contraband and non-contraband. Everything except ostrich feathers is used for war purposes. Further, the whole idea of codifying neutral and belligerent rights is incompatible with the Kellogg-Briand Pact. It is quite illogical as well as a confession of lack of faith to draw up rules for warfare if the use of warfare itself is to be renounced.

We are still left, therefore, with the fundamental problem of Anglo-American relations — What is to happen when one nation becomes involved in a war while the other is neutral? There is but one solution — to make the Briand-Kellogg Pact effective. The alternatives are inexorable. Either war is prevented, or every war is liable to develop into an Anglo-American war.

Consideration of the general problems of disarmament leads to the same conclusion. So long as war is tolerated as a method of settling international disputes, armaments are inevitable. Yet no nation can have security by ar-

mament unless its armament is strong enough to make its neighbors insecure. Hence the perpetual repetition throughout history of competition in armaments ending in periodic war.

So long as national armaments exist they must be used either as instruments for war, or as instruments by which resort to war is prevented. They must be used either for military purposes or for police purposes. There is no third alternative.

It is sometimes suggested that the peace problem can be solved by distinguishing between "public" and "private" war, or by defining an "aggressor." But who is to decide that a certain nation is an "outlaw?" Not the League of Nations, for the United States is not even a member of it. Moreover, in all serious disputes the League Council itself is likely to be divided. As for determining an "aggressor," no investigating machinery that can be devised will act quickly enough. Who knows whether Paraguay or Bolivia was the "aggressor" in the late dispute? The creation of "automatic" tests, such as a refusal to arbitrate, simply means that it becomes the main function of diplomacy to maneuver an opponent into a position in which it will automatically be in the wrong. The "aggressor" solution is an illusion.

The only way forward is to begin to apply in the international sphere exactly the same method as preserves peace in the national sphere, which is to distinguish between the prevention of violence and the settlement of the dispute. Peace in the domestic sphere begins when a community makes up its mind that it will prohibit the use of violence because until that is effective there is no security that people will not try to take the law into their own hands, everybody goes armed, and shooting is chronic. It is only when violence is prevented that the reign of law and justice can begin. Lasting peace in the international sphere will similarly begin only when the nations make up their minds that the settlement of international disputes by war is disastrous because war anywhere tends to damage everybody and to engulf the whole world.

The *prevention of war* is the primary interest of every nation in the world. The *settlement of disputes* may be merely a local affair. War in Europe is a vital concern of the United States, just as war in South America is a vital British concern, because war in either continent may produce an Anglo-American crisis over neutral trade. But the settlement of the local problems, once the war has been stopped, may be of merely local concern.

If the signatories of the Pact of

Paris, and especially the United States and Great Britain, should publicly recognize that they are all vitally interested in any threat to the peace of the world, they could make the Kellogg Pact effective. What they would do to prevent hostilities cannot now be foreseen. But once public opinion comes to the conclusion that the settlement of international disputes by war must be prevented, it will certainly mobilize action against war which will sweep older diplomatic machinery aside. It may be that, if persuasion fails, embargoes will be employed, or some form of financial or naval blockade, or military pressure. But can there be any doubt that if the leading signatories of the Pact, or even the United States and the British Commonwealth by themselves, were really determined to prevent the settlement of disputes by war, they would be able either to prevent hostilities, or to choke off any war which had begun? The procedure was laid down in the Washington Four Power Treaty of 1922 for dealing with difficulties which may arise in the Pacific. It only requires extension to cover all war threats.

What happened in the recent Græco-Bulgarian dispute illustrates the method admirably. The Council of the League of Nations was in session and the parties were immediately summoned. As they began to state their case, M. Briand stopped them and said that the Council could not then consider the rights and wrongs of the case; its first duty was to stop hostilities; once guarantees on this point were given, it could take steps to secure an impartial and fair adjudication of the matters in dispute. Both sides agreed to stop hostilities and to withdraw behind a defined line, and in due time a verdict was given. The Bolivia-Paraguay dispute was settled by the League along similar lines, save that here the final settlement of the issues was left entirely to the Pan American Conference in session at Washington.

Either we prevent all war, or every war tends to develop into an Anglo-American war and a world war; either armaments will be used as police instruments whereby resort to war is prohibited, or they will be used as the instruments by which international disputes are settled by war.

We are clearly at a turning point of the world's history. To paraphrase what Abraham Lincoln said of another issue: the nations cannot stand for law at home and war abroad; justice and reason must settle everything, or war, in the future as in the past, will settle everything: force must be mobilized behind law and justice, or it will be used for war.

The Student Invasion of Europe

Condensed from The World Tomorrow (October, '29)

R. W. Abernethy

For several years a resident abroad: now on the faculty at Hill School

WITH the steamship companies designating a particular class of travel "Student Travel," with the Foreign Offices reversing long-standing practice to grant free visas to students, with over 20,000 young men and women from American colleges traveling annually to Europe, it is time that we ask ourselves what are the implications of this student invasion.

The aspect likely to be seen first by anyone who knows European students is the amazing fact that 20,000 *students* can travel. Each of these students has paid out anywhere from $400 to $1000 on his summer's play. The fact that as many as 20,000 can spend on an average $600 in less than three months, is enough to stagger any Continental student, especially those in countries of depreciated currency.

Translated into French money, for example, $600 is 15,000 francs, and the salary of a full professor in the Sorbonne was, until recently, several hundred francs below that. Again, it is quite enough in marks to send a student to the University of Munich, Berlin or Göttingen for a year. It would be a fortune to some of the thousands of Russian refugee students in Prague, for example. And here are 20,000 American students spending this fortune on a good time.

The part the ordinary American tourist — and there are 600,000 of them annually — is playing in hastening the growing estrangement between Europe and America is not, I believe, sufficiently appreciated. That there is growing up in Europe a dislike of this country compounded of jealousy, fear and resentment, is manifest to anyone who has spent years abroad and come to know people who are willing to talk frankly.

What is the European indictment of our students and of tourists in general? It is that, by and large, they show a lack of thoughtfulness and fundamental courtesy. I stood at the clerk's desk in one of Berlin's finest hotels one July night in 1925. A young American girl came up to the clerk and demanded rather curtly the key to her room. The clerk, who had just come on duty, reported that the key was not in the box. "It is," snapped the

girl, "I left it here when I went out." The clerk obligingly looked again, with the same result. In words that must have made the young man writhe the girl insisted that he produce the key. His response was to suggest very politely that perhaps other members of her party had taken it. He would find out. While he was telephoning the girl turned toward me and said, "God, what stupid people these are. I can't wait till I get home." The clerk returned with the announcement that someone had already taken the key to the room, whereupon the girl was off with no word of apology or thanks.

I turned to the young man. "I hope you don't think all Americans are like that."

He smiled. "It is hard sometimes to be polite," he said. "I am a man, she is a lady: I am an employe of this hotel, she is a guest. What else" — with a shrug of the shoulders — "can I do?"

In July 1926 the franc was worth only about two cents. Certain tourists proceeded forthwith to take great glee in pasting them on their bags as labels and even sticking them on bus windows. In the little family group where we were discussing this one night in Paris, my French friends told me exactly what they thought of such conduct, and they spoke heatedly. What bothered me was that they generalized from this conduct, saying things about "les américains" as though our whole people were like that. It is impossible to estimate what harm such thoughtlessness did.

In a tiny little Austrian village a group of Americans resident in various European countries met for a few days of conference. It was the summer of 1923 and the Austrian crown was worth next to nothing. Through some bit of fortune we were able to have cloth napkins at our table places. Since we were to be there for several meals and each would have to keep his own napkin, we had to mark them for identification. Someone hit upon the bright idea of pinning a 100 crown note to his serviette and writing his name on the note. In high glee we followed suit. I shall be ashamed of that act of mine until my dying day.

Further instances such as these could be cited, if it were necessary to show that there is all too frequently a lack of courtesy and elemental decency on the part of many American tourists when abroad. As long as this continues is it any wonder that the breach is widening?

The second point in the European indictment has to do with our conscious or unconscious attitude of superiority. In the United States things are "bigger and better." When I have heard

my countrymen grumble over some relative inconvenience like not being able to get a room with bath, or not finding butter and ice water on the table, and as I have heard that growl almost inevitably end up with "Won't I be glad when I get home!" I have been sorely tempted to ask why they ever left!

The attitude of unconscious superiority shows plainly in the naïve assumption nine out of ten American tourists have that everybody ought to speak English. If taken to task about it we say there is not the same necessity for our learning French or German or Italian, by which we mean it is not necessary to do business in America with any language other than English. This is probably true; but we thereby identify business with life, something which no European of culture would think of doing.

A third count in Europe's indictment is our certainty that money is all-powerful. There are few Americans traveling abroad who give any other impression. They feel that money has that quality of love that can make man bear all things, believe all things, hope all things and endure all things.

Naturally with so much money in evidence, backed by a readiness to part with it, it is a rare hotel man or taxi driver who will not fall to and help the tourist out, generally by unconscionable over-charging. For this the American is indignant, and rightly so. He is not used to being swindled at home, and when he is swindled abroad, he is not slow to tell the head waiter and "the whole damn country" what he thinks of it.

Now consider the effects of the summer trip on the tourist-student? He returns to his campus with his original prejudices more than likely confirmed and his attitudes as uncompromising as before. For from being less provincial, less jingo by reason of his exposure to other cultures, the old and narrow parochialism is increased and, from the point of view of a healthy internationalism, the last state of this man is worse than the first.

The summer's experience, while it may seem wholly innocent and gay to the college students, more often than not has contributed in some way to the ever-widening gulf between Europe and this country, and has sent them back to their campus thanking God they are Americans. With such results the outlook for tolerance, sympathy and international goodwill is indeed dark.

Ponderables

ONE of the remarkable inconsistencies of American life is the coexistence of democratic manners and an intense snobbery.

When they have got over the first shock of being called "Folks" by the attendants on the Pullman car, visitors from older and more feudal countries soon find these manners refreshingly sensible. Impressed by these superficial symptoms of liberty, equality and fraternity, they are all unprepared for the intense and passionate snobbishness, which manifests itself especially in the older cities of the Union. The amount of space devoted by the press to the doings of "Society" is a fair indication of a country's social snobbery. In America it is considerable. The Society columns in the American dailies are as long as they are in the papers of avowedly aristocratic countries, the periodicals devoted to the social, the smart and the correct are as numerous. Meanwhile the Old World comedy of social snobs and climbers is played by a new aristocracy of money. The sentiments one may hear expressed in New York society, the expressions one may see on the faces of the smart Elect would do credit to a duchess of the *ancien régime*. — *Aldous Huxley* in *Vanity Fair*.

The true champions of the masses are our engineers and inventors. The inventor of the automobile has benefited horses more, has saved them from more toil and suffering, than all the world's societies for the prevention of cruelty to animals. We have no galley slaves because they have been emancipated by the inventor of the marine engine. The use of fuel oil has redeemed an army of stokers from the inferno of the stokehole. The ultimate end of technical progress is to provide every man with the comforts and conveniences that are today reserved for millionaires. The inventors and engineers are fighting want and poverty; they are fighting slavery; their object is to universalize wealth, power, leisure, beauty, happiness. — *Glenn Frank* quoted in *Scientific American*.

Culture is activity of thought, and receptiveness to beauty, and humane feeling. . . . In training a child to activity of thought, above all things we must beware of what I will call "inert ideas" — ideas merely received into the mind without being utilized, or tested, or thrown into fresh combinations. Education with inert ideas is not only useless: it is, above all things, harmful. *A. N. Whitehead* in *The New Republic*.

We (in America) are so busy *doing* that we have no time to *be*. We have been "doing" for 300 years. We have cleared and settled a continent. We have accumulated the most colossal store of material power and resources the world has ever seen. Is it not time that we began to think what to do with all our means, what the end is that we wish to attain? Are we forever to continue getting more things in order to get more things with which to get more things, and so on *ad infinitum?* . . . At present what we need above all else in America is education — not the infinitely variegated supply of courses that make a college catalog look like Sears Roebuck's, but a liberal education that will enable us to create a scale of values for our experiences and to take a philosophical attitude toward the complex reality about us. — *James Truslow Adams* in *The Forum.*

We are apt to forget "the good old days" of poverty. Brown University was founded in 1764 as The College of Rhode Island. After 30 years of highly successful operation, the corporation of this already well-known institution passed a resolution that if any person would give the college $6000 he should have the right to name it. Even at that, there were no takers. Six thousand dollars was too much to expect from any donor of those times, and after waiting eight years, in 1803 the corporation was forced to cut the price to $5000. In 1804, Nicholas Brown came forward with this sum and Rhode Island College became Brown University. — *Christian Gauss* in *The Saturday Evening Post.*

The story is told of a peasant with a troubled conscience who had come to a monk for advice. The peasant had circulated slander about a friend — only to find out later that it wasn't true.

The monk was old and wise. "If you want to make peace with your conscience," he said, "you must fill a bag with chicken down, go to every dooryard in the village, and drop in each of them one fluffy feather."

The peasant did as he was told. Then he came back to the monk and announced that he had done penance for his folly. "Not yet!" said the monk sternly. "Take up your bag, go the rounds again, and gather up every feather that you have dropped!"

"But the wind must have blown them all away."

"Yes, my son," replied the monk. "And so it is with gossip. Words are easily dropped, but no matter how hard you try, you can never get them back again." *Merle Crowell* in *The American Magazine.*

(*Continued from Inside Front Cover*)

"I am a night pumper at a coal mine, and I read your wonderful little magazine by the light of a carbide lamp. It surely relieves the monotony of the long hours. I'd rather forget my lunch pail than my Reader's Digest."

"I am ranger at the Carlsbad Cave National Monument. At noon, the party has 30 minutes for lunch at a point 750 feet under the surface. That is when I read my Digest."

Then, by contrast, there is this letter from Canada: "I am a 'face-lifter.' That is, one who refaces the stone work of buildings. It is my common practice to have a copy of The Reader's Digest with me and at noon hour, when swinging on a scaffold 15 or 20 stories above the multitude, I read the Digest in peace and quietness. On one occasion I was working on a hotel building in Ottawa. While eating my lunch with a copy of the Digest in my hands, I was startled by a woman's voice coming from an open window behind me asking if I would mind lending her my copy when I was through."

"As regularly as I set the table for dinner each night, the Digest is placed by my husband's plate. When dinner is over he reads an article aloud — one each evening — sometimes re-reading it, when it seems to us a particularly impressive one. If it were put to a vote as to whether we would have dessert or the Digest, the *Digest would win!*" — from Bakersfield, Calif.

This from an eleven-year old boy in Colorado: "There are three Reader's Digest subscriptions in our family. Grandfather gets awfully upset and disgruntled if anyone takes his copy out of his room for he likes to read an article or two in the night when he is awake. One copy is kept in the bathroom and the whole family jumps on anyone who takes that copy away. Father takes one copy in his pocket to read at odd minutes."

(*Continued Outside Back Cover*)

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(*Continued from Inside Back Cover*)

There are dozens of variations of the use of the Digest while "waiting." "I consider my husband the most punctual man on earth. Yet your remarkable little magazine is thoroughly covered by me during each month. I find, in the moments *I wait for him!*"

The dean of men in a State university: "Very often my wife does not get down to breakfast as soon as I do. I avoid irritation which would start the day badly by regularly reading the Digest while waiting for her."

There are even those who like to do their reading in automobiles. "My husband is a very busy man and takes many long auto trips. I frequently accompany him and find it very convenient to read aloud the large-typed, short and snappy articles. Our comments add zest to the reading matter and our trip is made really enjoyable." Another woman, in Maryland, writes: "Last week my husband seriously considered getting a new automobile, but as the final vote was mine I decided to keep the old car — for one very important reason! The newer model had no pocket on the right front door for The Reader's Digest."

A Major of the U. S. Infantry, Governor's Island, N. Y. writes: "By army regulations, the personal baggage of officers in the field is limited to 50 pounds, so obviously our reading problem is difficult. When such a magazine as yours comes along, it can only be described as a godsend. I read the Digest regularly, and find its popularity among the officers of the regular Army, both at home and in our foreign possessions, constantly increasing."

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